

	оприне	No	No	remis	10	Description	For Part No	Projec	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Containe No	Statu	Receiv Date	e Price/Uni
20039126	ACI001-VC	1	1	Net 30	M4140H-R1.000	4140 round bar 1.00 : AISI 4140H ROUND BAR PER AISI41400R ASTM A304- 02/-A-434-BC/-A193-03- GRADE B7/-A29-03/- A322-91 OR UNS#- G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE				12	3/7/2018	10	1	S048645	Stock	3/7/2018	\$ 4.66 / ft
		2		, i	M304B0.500X6.000	STRENGTH-66KSI 304 Bar 0.500 X 6.000"": MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft				6		6		S048646	Stock	3/7/2018	\$ 45.49 / ft
		3			M30480.625X6 000	304 Bar 0.625 X 6.000°°: MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft						6	61	S048647	Stock	3/7/2018	\$ 55.83 / 11
		4			M304S11GA	304/316 0.125 Sheet: MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240				96		96		S048648	Stock	3/7/2018	\$ 12.23 / sf
		5			M304S18GA	304/316 .050 Sheet: MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240				64		64		S048649 ¿	Stock	3/7/2018	\$ 5.36 / sf
		6		. 1	M304S16GA @	304/316 Sheet .063 ; MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf				192		192	4	6048650	Stock	3/7/2018	\$ 6.51 / sí
		7		A		MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf				96		96	S	048651	Stock 3	17/2018	\$ 3.91 /sf
		8		N		304 SS Round bar 5.500 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft				8		8	S	048652	Stock 3	/7/2018	\$ 310.63 / H
		9				304 SS Round bar 0.625 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE eceive ft				24		26	s	048653	Stack 3	7/2018	2.66 / ft
		12			000W0.120	A513 Seamless Alloy Steel Round Tubing ""dia. x 0.120"" Wall				20		23	S	048654 S	tock 3/	7/2018 S	2.47 / R
		13		M	A 4 4 C C	06 1 T6 Bar 2.00 X 1.25 : MATERIAL: 6061- 6/T651/T6510/T6511/T62 LLUMINUM BAR PER QQ-A-225/8 OR AMS-QQ225/8 OR AMS 117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ200/8 OR AMS 4160 RA STM B211 OR STM B211 receive ft				12		12	SI	)48655 S	itock 3/	7/2018 \$	10.11 / ft

PO No	Supplier	No	Rel	Terms		Description	For Part No	Project	Equipment ID	Order	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Uni
		14				6061-T6 Bar .750 X 4.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QC-A-225/8 OR AMS-QC- A-225/8 OR AMS 4117/4128/4115/4116 OR QC-A-200/8 OR AMS-QC- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft						12	fig.	\$048656	Stock	3/7/2018	\$ 10.43 / ft
		16		(19		304 Bar .750 X 2.50 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive fi				36		36		S048657	Stock	3/7/2018	\$ 25.24 / ft
		17				6061-T6 .050 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS-4025 OR AMS 4027 OR ASTM B209 receive sf				96		96		S048658	Stock :	3/7/2018	\$ 3.31 / sf
		18		ħ	F	506176 Sheet .250 : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS-QG-A-250/11 OR AMS 4025 OR AMS 4027 DR ASTM B209 receive sf				32		32		5048659	Stock 3	M7/2018 \$	12.30 / sf
		19	2		1 1 N	010-1025 Round Bar 375 : MATERIAL: AISI 018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM 1108				12 3	3/8/2018	12		048817 S	Stock 3	/7/2018 \$	0.50 / ft
		20	1	M	1 M 1 A O 3 C	010-1025 Steel Bar .000 X 1.000 : 1ATERIAL: AISI 1010- 025 OR ASTM .36/A366/A569/A570 OR IR CSA G40-21 BW/44W/50W/60W/70W SA G40-21 OR BW/44W/50W/60W/70W				3	8/7/2018	12	s	048661 S	tock 3	77/2018 \$	3.60 / ft
									Total:	736	-	739					

Plex 3/7/2018 1:54 PM Dart.Dubois.Pascal



Billed to

Shipped to

, Ontario,

DART AEROSPACE LTD

1270 , ABERDEEN ST. HAWKESBURY, Ontario, K6A 1K7

# ACIER OUELLETTE INC.

935, Boul. du Hâvre Salaberry de Valleyfield (Québec) J6S 5L1 Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Date Customer N° 2018/02/27 CLI0001056 2018/03/06

Your order N° 39126 Delivery date

Processed by Josianne Bourdon

Salesman **Credit Terme** Carrier Net 30 Days **OUELLETTE VALLEYFIELD** 

Att : CHANTAL LAVOIE Tél.: 613-632-5200 Page

Instruction F-M	<b>Delivery Route</b>	U		raye			j-			
					PCS NB	a		Internal Use Only	Use Or	nly
Product Description	Weight	Qty	U/M	CMD	EXP	в/о	IN	S	C	OUT
1 ROUND 4140 HEAT TREAT 1 (R) * R4140-1H 4919	32.04	12.00	PI_\$CLB				_			
1 X 10" HEAT: 177569  COUPE A LA SCIE  SCIE  1		1.00	N C		16.		,0	AR	0 7 2018	<b>8</b>
2 FLAT SS 1/2 X 6 SS304 RANDOM NS FSS-126-V 9086 1 X 6' HEAT: 600) AC13907-SUP-05/03	61.20	6.00	PI_\$CLB		8.2	9	0	MAR	R 0 7 2018	2 X D
3 PLATE SS 5/8 SS304 HRAP RANDOM NS PSS-58-V 9133  1 X 6' (HEAT: 702625E  AC13907-SUP-05/63	160.99	6.00	PIZ_\$CLB		6-5		6	N C	WAR 0 7 2018	200



Billed to

Shipped to

, Ontario,

DART AEROSPACE LTD

1270 , ABERDEEN ST. HAWKESBURY, Ontario, K6A 1K7

'ACIER OUELLETTE INC.
935, Boul. du Hâvre
935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Date Delivery date **Customer N°** CLI0001056 2018/02/27 2018/03/06

39126

Your order N° Processed by Josianne Bourdon

Salesman Carrier

OUELLETTE VALLEYFIELD

Att : CHANTAL LAVOIE Tél.: 613-632-5200

**Credit Terme** Net 30 Days

Page

Technication F-M	Delivery Route	5		191		
				PCS NB	In	Internal Use Only
Product Description	Weight	Qty	U/M CMD	D EXP B/O	IN	I S C OUT
4 SHEET SS 11G SS304-2B (4 X 8)	504.00	96.00 PI2	PI2_\$CLB		2/0/2	
FESS-11G483042B <b>3402</b>				7	2	MAR 0 7 7019 9-89
3 X 4' X 8' (HEAT: 459P)				C	3	200
5 SHEET SS 18G SS304-2B (4 X 8)	134.40	64.00 PI2	PI2_\$CLB		2/2/10	-4
FESS-18G483042B <b>3425</b>				7	10	MAR 0 7 2018
2 X 4' X 8' (HEAT: LZ513CO3 )	The state of the s	Andrien Andrews Andrew		0	69	7000
5 SHEET SS 16G SS304-2B (4 X 8)	504.00	192.00 PI2	PI2_\$CLB		210/00/10	
FESS-16G483042B <b>3419</b>				7	11	MAR 0 7 2018
6 X 4' X 8 HEAT: 514212		the state of the s	The state of the s	6		5.0
7 SHEET SS 20G SS304-28 (4 X 8)	150.72	96.00 PIZ	PI2_\$CLB		20/1/10	
FESS-20G483042B <b>3430</b>				-	20	
3 X 4' X 8" HEAT. 853774				رص لرس	1	0 7 9000
						MAN O / CONST



# **DELIVERY - CLIENT**

Copy C000075982

001H11H11H	935, Boul. du Hâvre Salaberry de Valleyfield (Québec) J6S 5L1 Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242	Date Delivery date Your order No	2018/02/27 2018/03/06 39126
		Your order No	39126
Billed to  DART AFROSPACE   TD	Shipped to	Processed by	Josianne Bourdon
DAM DENOGRACE FIRE		Salesman	
1270 , ABERDEEN ST. HAWKESBURY, Ontario, K6A 1K7	, Ontario,	Carrier	OUELLETTE VALLEYFIELD

Att: CHANTAL LAVOIE Tél.: 613-632-5200

**Credit Terme** 

Net 30 Days

Instruction F-M	<b>Delivery Route</b>	ъ	Page		ω	
				PCS NB		Internal Use Only
riodace pescripaon	Meidir	Ath O'lei	CMD EXP	в/о	IN	I S C OUT
8 ROUND SS 5 1/2 304 NS	646.24	8.00 PI_\$CLB	3			D
RSS-512 <b>10145</b>					18	
1 X 8" NEAT: 41257 AC13908-MM-28/02			4	U	0	MAR 6 7 2010 9
9 ROUND SS 5/8 304 (R) * RSS-58 5777 2 X 12' R/L (HEAT: 439067	25.03	24.00 PI_\$CLB			R	MAR 0 7 2018
10 TUBE MEC 0.625 OD X:095 (R) *  TME-0625095 6763  1 X 20' R/L HEAT:15D2317	10.76	20.00 PI_\$CPI	24,		٠, ٥	
TRANSIT ST-JEROME LE 28/02						

Billed to

Shipped to

, Ontario,

DART AEROSPACE LTD

HAWKESBURY, Ontario, K6A 1K7

1270 , ABERDEEN ST.

# **DELIVERY - CLIENT**

Copy C000075982

ACTER OUELLETTE INC.
935, Boul. du Hâvre
935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248

Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

**Delivery date** 

Date

Customer N°

CLI0001056

2018/03/06 2018/02/27

Your order No 39126

Josianne Bourdon

Processed by

Salesman Carrier

OUELLETTE VALLEYFIELD

**Credit Terme** 

Net 30 Days

	Weight	Delivery Route	Att : CHANTAL LAVOIE Tél.: 613-632-5200
44	70	5	Tél.: 613-632-5
6/17	I/M		5200
CMD		Page	
EXP	PCS NB	(D)	Clear lettie
в/о	NB		ā

6	2	

15 FLAT ALU 1 1/4 X 2 6061-16

35.28

12.00

PI\_\$CLB

150

4.19

1 X 20' R/L HEAT: D37954

FAL-1142

2456

IXIX HEAT:

385790

14 TUBE MEC 1.000 OD X .120 (R) \*

22.56

20.00

PI\_\$CPI

1+20/11.

Sign

CAR

TRANSIT ST-JEROME LE 28/02 1 X 20' R/L HEAT: 1502800

TME-1000120

6505

12 TUBE MEC 0.750 OD X .095 (R) \*

13.30

20.00

PI\_\$CPI

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Internal Use Only

230

**Product Description** 

TME-0750095

8163

Instruction

T

NIR: R-109516-6

Next Page...



Billed to

DART AEROSPACE LTD 1270 , ABERDEEN ST.

Shipped to

, Ontario,

HAWKESBURY, Ontario, K6A 1K7

**DELIVERY - CLIENT** 

CO00075982

Copy

\* ACIER OUELLETTE INC. 935, Boul. du Hâvre 935, Boul. du Hâvre Salaberry de Valleyfield (Québec) J6S 5L1 Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Date Customer N° CLI0001056

Delivery date

2018/03/06 2018/02/27

Your order N°

39126

Salesman

Processed by

Josianne Bourdon

Carrier

Net 30 Days OUELLETTE VALLEYFIELD

Page **Credit Terme** 

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Product Description	Weight		PC	PCS NB	Internal Use Only
		ζty 0/19	CMD EXP	В/О	IN I S C OUT
16 FLAT ALU 3/4 X 4 6061-T6 * FAL-344 2596 \( \)	42.29	12.00 PI_\$CLB			
1 X 12" HEAT: 70740			40		MAR 0 7 7009
17 FLAT SS 3/4 X 2 1/2 SS304 RANDOM NS FSS-34212-V 8747 3 X 12' R/L (HEAT: 26600)	229.50	36.00 PI_\$CLB	0,000 m		36 MAR 0 7 2018
18 ALU SHEET .051 (16G) 6061-T6 (4 X 12) FEAL-0514126061 3145 2 X 4' X 12' CHEAT: 32115/01	68.93	96.00 PI2_\$CLB	Oxyto.	2.096	9172 MAR 0 7 2018
TRANSIT ST-JEROME LE 28/02					

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# ACIER OUELLETTE INC. **DELIVERY - CLIENT**

CO00075982

935, Boul. du Hâvre Salaberry de Valleyfield (Québec) J6S 5L1 Customer N° CLI0001056

	Tél.: 450-377-4248 Mtl: 514-336-4248 Ext : 800-667-7249	Date	2018/02/27	
	Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242	Delivery date	2018/03/06	
Billed to	25	Your order No	39126	
DART AEROSPACE LTD	Simpled to	Processed by	Josianne Bourdon	
1270 , ABERDEEN ST.	, Ontario,	Salesman		
HAWKESBURY, Ontario, K6A 1K7		Carrier	OUELLETTE VALLEYFIELD	
	Att : CHANTAL LAVOIE Tél.: 613-632-5200	<b>Credit Terme</b>	Net 30 Days	
Instruction F-M	Delivery Route 5	Page	σ	
Product Description	Weight Qty U/M	PCS NB	Internal Use Only	
20 ALLI DI ATE 1/4 SOS1 TSS1 /4 V S		CMD EXP B/O	I S C	PUS
PAL-14486061 4242	117.12 32.00 PI2_\$CLB	-6°	20012	1
1 X 4' X 8' NEAT: 16-39426053		Ay	04 MAR 0 7 2010	3
21 ROUND CR 3/8 1018 (R) * RCR-38 5337	4.51 12.00 PI_\$CLB	,	> -	748
1 X 12' R/L HEAT: 41776 GM		40	NAR 0 7 2010	
CCR-1 1018 (R) *	40.80 12.00 PI_\$CLB	\$5,		
1 X 12' R/L (HEAT: 41198 G		14.0	MAR 0 7 2018	
			0	
All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer sexpense. The warranty offered by "Collowing conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in within five (15) days with this contract will lead to payment by acceptance of the selection and permits to the seller, at his choice to claim for the balance due of the representation of the procession of the procession of the procession of the procession.	Total Weight (Lbs): 2 803.67  NI  It is made in full, complete and cashed. All lost materials are at the buyer's expense, varranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accept tration charges of 2% per month (24% per annum) on all past due amounts over 30 at his choice to claim for the balance due of the reprospectation of the proofs and all of the choice to claim for the balance due of the reprospectation.	NIR: R-109516-6 se. The warranty offered by cepts to respect the 20 days. Any default in		

Prepared By :

Verified By:

Delivered By:

Time

Customer's Signature

Date

3

Total (\$CAD)

CLIVY



Dart Aerospace Ltd. 1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada

Tel (613) 632-5200

# **PURCHASE ORDER** PO039126

Supplier:

ACI001-VC

Acier Ouellette Inc. 935 Boul. Du Havre

Valleyfield

QC

J6S 5L1 Canada Phone: 800 667 4248 Fax: 450 377 5696

PO No:

PO039126

PO Date: 2/26/18

3/2/18

Due Date: **Purchase Order** 

Revision: **Revision Date:** 

FEB 2 7 2018

MAILE

Ship-To Contact:

Lavoie, ChantalPhone:

clavoie@dartaero.com

Ship To:

1270 Aberdeen Street

Hawkesbury

K6A 1K7 Canada

Phone: 613-632-5200

Via:

Ground

Pymt Terms:

Net 30

Freight Terms:

Special Comments: quotation no: sou0087982

Line		Supplier			Don	0.1	-			
Item		Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M4140H-R1.000		4140 round bar 1.00 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/-A-434- BC/-A193-03-GRADE B7/ A29-03/-A322-91 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI	Firmed	3/2/18	12 ft		12 ft	\$4.664/n	
	M304B0.500X6.000	: : : : : :	804 Bar 0.500 X 6.000" MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE sceive ft	1	3/2/18	6 ft '	6	6 ft	\$45.48666/n	\$272.92 DAS
	M304B0.625X6.000	: S S A N	04 Bar 0.625 X 6.000" MATERIAL: AISI 304/316 S BAR OR AISI 304/316 S PLATE AS PER ASTM 276 OR ASTM A240 OTE: AISI 303 NOT CCEPTABLE pecive ft	Firmed :	3/2/18	6 ft -	(6)		\$55.83333/n AR 0 7 2018	\$335.00 D.40 9.00
4 M	1304S11GA	: N S: A: AI 55	04/316 0.125 Sheet MATERIAL: AISI 304/316 S SHEET ANNEALED S PER MIL-S-5059 OR MS 5513 (304) OR AMS 524 (316) OR ASTM 0240 OR ASME SA240	Firmed 3	3/2/18	96 sf	0 (si) 76	96 sf		1,174.06 D. C f 5 Seal

Lim				Items	9						
Lin Iter	m Part	Supplier Part No	Description	Sta	tus	Due Date	Order Quantit	Received Quantity		Unit Price (CAD)	Extende
5	M304S18GA		304/316 .050 Sheet : MATERIAL: AISI 304/3 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AM 5524 (316) OR ASTM A240 OR ASME SA240	16	ned	3/2/18		-	64 s		5 \$342.7 DAS
6	M304S16GA	5	304/316 Sheet .063 MATERIAL: AISI 304/31 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 eceive sf	6	ed 3	8/2/18	192 si	1df , oeg		\$6.508625/s	\$1,249.6 DAS \$4 \$-39
7	M304S20GA	: A A 5: A	MATERIAL: AISI 304/316 MATERIAL: AISI 304/316 S SHEET ANNEALED S PER MIL-S-5059 OR MS 5513 (304) OR AMS 524 (316) OR ASTM 240 OR ASME SA240 eccive sf	-	d 3/	/2/18	96 sf	96		\$3.9085416/sf 0 7 2018	\$375.22 DAS 44 9-89
	M304R5.500	S AS	04 SS Round bar 5.500 MATERIAL: AISI 304/316 S ROUND BAR AS PER STM A276 NOTE: AISI 03 NOT ACCEPTABLE ceive ft	Firme	3/2	2/18	8 ft	8	8 ft	U 7 2018	).\(``
9 1	M304R0.625	: N SS AS 30	4 SS Round bar 0.625 MATERIAL: AISI 304/316 S ROUND BAR AS PER STM A276 NOTE: AISI 3 NOT ACCEPTABLE seive ft	Firmed	3/2	2/18	24 ft	0(ft) 26	1	0 7 2018	\$63.82 DAG
	MT-A513-T- 0.625W0.095	Ste	13 Seamless Alloy eel Round Tubing 25"dia. x 0.095" Wall	Firmed	3/2/	/18	20 ft	O ft	20 ft	\$2.9595/ft	\$59.19
	T-A513-T- .750W0.095	Ste	13 Seamless Alloy el Round Tubing 5"dia. x 0.095" Wall	Firmed	3/2/	18	20 ft	. O ft	20 ft	\$2.4095/ft	\$48.19
1.	T-A513-T- 000W0.120	Stee	3 Seamless Alloy el Round Tubing 1"dia. 120" Wall	Firmed	3/2/	18	20 ft	73°th	20 ft MAR (	\$2.4695/ft 7 2018	\$49.39
M	6061T6B2.000X01.250	: MA T6/T ALU QQ- A-22 4117 QQ-/ A-20 OR A	1-T6 Bar 2.00 X 1.25 NTERIAL: 6061- 1651/T6510/T6511/T62 MINUM BAR PER A-225/8 OR AMS-QQ- 15/8 OR AMS 1/4128/4115/4116 OR A-200/8 OR AMS-QQ- 10/8 OR AMS 4160 ASTM B211 OR M B221	Firmed	3/2/1		12 ft	(A) Z	12 ft	\$10.1125/ft :	\$121.35

				Items						
Line	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extende Price
19 i	M1018R0.375		1010-1025 Round Bar .375	Forecast		12 ft	0 ft		\$0.4958333/ft	
			: MATERIAL: AISI 1018- 1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108				12	ı	MAR 0 7 2018	DAN 111
				Firmed Sub 1	3/8/18 <b>Fotal:</b>	12 ft 24	0 ft	12 ft <b>24</b>	\$0.4958333/ft	\$5.95 <b>\$11.90</b>

**Order Notes** 

**Procurement Quality Clauses** 

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 3/7/18 1:43 PM dart.lavoie.chantal

Grand Total: \$370.61

Lin	g	C		Items						
iten	n Part	Supplier Part No	Description	Stat	us Da		Received Quantity		Unit Price (CAD)	Extende
14	M6061T6B0.750X04.000		6061-T6 Bar .750 X 4.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T ALUMINUM BAR PER QQ-A-225/8 OR AMS-Q: A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-Q: A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	62 Q-	3/2/			12 ft	\$10.429166/f	t \$125.1
	M6061T6B1.000X1.750		6061T6 Bar 1.000 X 1.75 MATERIAL: 6061- 76/T651/T6510/T6511/T6 NLUMINUM BAR PER QQ-A-225/8 OR AMS-QG 1-225/8 OR AMS 117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QG 1-200/8 OR AMS 4160 PR ASTM B211 OR STM B221 eceive ft	32	d 3/2/1	8 12 ft	Oft	12 ft	\$20.16666/ft	\$242.00
j	M304B0.750X2.500	S S A N	04 Bar .750 X 2.50 MATERIAL: AISI 304/316 S BAR OR AISI 304/316 S PLATE AS PER ASTM 276 OR ASTM A240 OTE: AISI 303 NOT CCEPTABLE ceive ft	6	3/2/1	3 36 ft	36		\$25.241944/h	\$908.71
7 1	M6061T6S.050	: M AL PE AM AM OF	061-T6 .050 Sheet MATERIAL: 6061-T6/T62 LUMINUM SHEET AS ER QQ-A-250/11 OR MS-QQ-A-250/11 OR MS 4025 OR AMS 4027 R ASTM B209 Delive sf	Firmed	3/2/18	96 sf	96	96 sf \$	3.3095833/sf ! AR Q 7 2018	\$317.72
•	M6061T6S.250	: M AL PE AM AM OR	61T6 Sheet .250 IATERIAL: 6061-T6/T62 UMINUM SHEET AS R QQ-A-250/11 OR IS-QQ-A-250/11 OR IS 4025 OR AMS 4027 ASTM B209 eive sf	Firmed	.3/2/18	32 sf	0(sf)		\$9.92875/sf	\$317.72
	MAR 0 7 2018  What is part	.31. .: M. 102 M10 MIL . MIL	ATERIAL: AISI 1018- 25 ROUND BAR 010S20GA AS PER -S-7097 OR ASTM	Firmed	3/2/18	12 ft	off)		0.4958333/M	\$5.95
М	1018B1.000X1.000	101 1.00 : MA 102: A36 OR 38W CSA		Firmed	3/2/18	12 ft	06	12 ft MAR	\$3.6025/R	\$43.23

				Items						
ine tem	Part Part No		Description	Due Date	Order Quantity	Received Quantity	Balance			
			C	order Notes					Grand Total:	\$8,592.9

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please www.dartaerospace.com for further explanation,

Plex 2/26/18 2:10 PM dart.lavoie.chantal



#### ACIER OUELLETTE INC.

935, Boul. du Hâvre

Salaberry de Valleyfield (Québec) J6S 5L1 Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248

Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 800-667-4248

## Quotation

SOU0087982

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST. HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Customer N°

CLI0001056

Date

2018/02/22

Revision N°

0

Prices valid until

2018/03/01

Your Order No

Processed by

Josianne Bourdon

Salesman

JOSIANNE

Carrier

OUELLE SDV

**Credit Terms** 

Net 30 Days

Page

4

		Page	7		
Product N° and description	Weight	Qty U/M	Qty U/M Price	Pcs Nb P	rice Amount
FLAT ALU 1 X 2 6061=T6 * FAL-12 2497 1 X 20 STOCK	48.00	20.00 PI_\$CLB	20.00 PI		149.260
ALU PLATE 1 6061-T651 RANDOM PAL-16061-V 4249 1 X 15" X 144" 4-5 DAYS	216.60	15.00 PI2_\$CLB	15.00 PI2	1.00 1 05	52.570 1 052.57
ALU PLATE 1 6061-T651 RANDOM PAL-16061-V 4249 1 X 16" X 144" 4-5 DAYS	231.04	16.00 PI2_\$CLB	16.00 PI2	1.00 1 12	22.740 1 122.74
FLAT ALL 3/4 X 6 6061-16 * FAL-346 1 X 12/ STOCK	63.44	12.00 PI_\$CLB	12.00 PI	1.00 21	8.850 218.85
FAL-1142 2456 1 X 42 STOCK	35.28	12.00 PI_\$CLB	12.00 PI	1.00 12	1.350 121.35
ALU SHEET .051 (16G) 6061-T6 (4 X 12) FEAL-0514126061 <b>3145</b> 2 X 4' X 12' 2-3 DAYS	68.93	96.00 PI2_\$CLB	2.00 UN	2.00 15	8.860 317.72
ALU PLATE 1/4 6061-T651 (4 X 8) PAL-14486061 4242 1 X 4' X 8' STOCK	117.12	32.00 PI2_\$CLB	1.00 UN	1.00 39	3.460 393.46
ALU-SHEET .081 (12G) 6061-T6 (4 X 12) FEAL-0814126061 <b>3195</b> 2 X 4' X 12' 2-3 DAXS	109.54	96.80 PI2_\$CLB	2.09 UN	2.00 252	2.455 504.91
ALU PLATE 5/16 6061-T651 (4 X 12) PAL-5164126061 4289 1 X 4'X 12' 2-3 DAYS 3125	216.96	48.90 PI2_\$CLB	1.60 UN	1.00 974	1.040 974.04
ROUND CR 3/8 1018 (R) * RCR-38	4.51	12.00 PI_\$CLB	12.00 PI	1.00 5	5.950 5.95

Date:

Next Page...



#### ACIER OUELLETTE INC.

935, Boul, du Hâvre

Salaberry de Valleyfield (Québec) J6S 5L1

Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

## Quotation

SOU0087982

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.

HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att: CHANTAL LAVOIE Tél.: 613-632-5200

CLI0001056

**Date** 2018/02/22

Revision No

Customer No

**Prices valid until** 

2018/03/01

Your Order No

Processed by

Josianne Bourdon

Salesman

JOSIANNE

Carrier

**OUELLE SDV** 

**Credit Terms** 

Net 30 Days

Page

5

Product N° and description	Weight	Qty	U/M	Qty	U/M	Price	Pcs Nb	Price	Amoun
SQUARE CR 1 1018 (R) * CCR-1 1813 1 X 12' R/L STOCK	40.80	12.00	PI_\$CLB	12.00			1.00	43.230	
FLAT 17-4 PH H900 1/4 X 4  N 4 X 12' 2 MONTH  OFFER SOL ANN A564 HRAP	0.00	4.00	UN	4.00	UN		4.00	296.000	1 184.00
ROND 17-4 H1150 1 3/4" DIA N 1 X 12' R/L 2-3 WEEKS	0.00	1.00	UN	1.00	UN		1.00	612.000	612.00
ROND 17-4 H1150 2 3/4"  N 1 X 12' R/L 2-3 WEEKS	0.00	1.00	UN	1.00	UN		1.00	1 476.000	1 476.00
ROUND SS 3/4 303 (R) * RSS-34303	144.19	96.00	PI_\$CLB	96.00	PI		8.00	58.208	465.67
FLAT-Q1 1/4 X 3/8 N 4 X 3'	0.00	4.00	UN	4.00	UN	0.00	4.00		0.00
FLAT ALU 3/4 X 6 6061-T6 * FAL-346 <b>2601</b> 1 X 12' STOCK	63.44	12.00	PI_\$CLB	12.00	PI		1.00	218.850	218.85
SURCHARGE ENERGETIQUE  FRAIS_ENERGETIQUE			\$						3.95

Total Weight (Lbs)

3 842.11

**Important** 

This offer is based on availability and current pricing conditions that may be revised upon reception of the order.

This offer is subject and conditional to credit approval.

Sub-total

20 190.05

TVH-13 · · 2624.71

Approuved and Accepted by:

Date :

Total (\$CAD)

22 814.76



#### Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST. HAWKESBURY, Ontario, K6A 1K7

#### Shipped to

, Ontario,

Att: CHANTAL LAVOIE Tél.: 613-632-5200

#### ACIER OUELLETTE INC.

935, Boul. du Hâvre

Salaberry de Valleyfield (Québec) J6S 5L1

Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

# Quotation

SOU0087982

**Customer Nº** 

CLI0001056

Date

2018/02/22

Revision N°

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2018/03/01

Your Order No

Processed by

Josianne Bourdon

Salesman

JOSIANNE

Carrier

OUELLE SDV

**Credit Terms** 

Net 30 Days

Page

.

Product N° and description	Weight	Qty	U/M	Qty (	U/M	Price	Pcs Nb	Dain-	
PLAT 4140 1" X 1 1/4 HT N 1 X 6' 7-10 DAYS	0.00	1.00		1.00		Tilde	1.00	140.000	140.00
PLAT 4140 1 1/4" X 1 1/2" HT N 1 X 6' 7-10 DAYS	0.00	1.00	UN	1.00	UN		1.00	180.000	180.00
PLAT 4140 1 1/2" X 2" HT  N 1 X 6' 7-10 DAYS	0.00	1.00	UN	1.00	UN		1.00	237.000	
ROUND 4140 HEAT TREAT 1 (R) * R4140-1H	26.70	10.00	PI_\$CLB	10.00	PI		1.00	46.640	46.64
COUPE A LA SCIE SCIE 1		1.00	UN	1.00					Gran.
HÈXAGONE AL. 2024-T4 5/16" N 1 X 12' 2-3 DAYS	0.00	1.00	UN	1.00	UN		1.00	65.000	65,00
FLAT SS 1/2 X 6 SS304 RANDOM NS FSS-126-V 9086 1 X 6' 2-3 DAYS	61.20	6.00	PI_\$CLB	6.00	PI		1.00	272.920	272.92
PLAT SS304 5/8 X 6 N 1 X 6' 2-3 DAYS	0.00	1.00	UN	1.00 (	JN		1.00	335.000	335.00
FLAT SS 3/4 X 2 1/2 SS304 RANDOM NS FSS-34212-V <b>8747</b> 3 X 12' R/L 2-3 DAYS	229.50	36.00	PI_\$CLB	36.00JN_	_\$UN		3.00	302.903	908.71
FLAT SS 3/4 X 1 1/2 SS304 NS FSS-34112 <b>9547</b> 1 X 6' 2-3 DAYS	22.98	6.00	PI_\$CLB	6.00JN_	\$UN		1.00	192.100	192.10
,									

Date :



#### **ACIER OUELLETTE INC.**

935, Boul. du Hâvre

Salaberry de Valleyfield (Québec) J6S 5L1

Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

# Quotation

SOU0087982

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST. HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Customer N°

CLI0001056

Date

2018/02/22

Revision N°

0

Prices valid until

2018/03/01

Your Order No Processed by

Josianne Bourdon

Salesman

JOSIANNE

Carrier

JOSTANNE

Credit Terms

OUELLE SDV Net 30 Days

Page

2

/			Page			2			
Product N° and description	Weight	Qty	U/M	Qty	U/M	Price	Pcs Nb	Price	Amoun
SHEET SS 11G SS304-2B (4 X 8) FESS-11G483042B 3402 3 X 4' X 8' STOCK	504.00	96.00	PI2_\$CLB	3.00	UN		3.00	391.356	1 174.07
SHEET SS 18G SS304-2B (4 X 8) FESS-18G483042B 3425 2 X 4' X 8' STOCK	134.40	64.00	PI2_\$CLB	2.00	UN		2.00	171.360	342.72
SHEET SS 16G SS304-2B (4 X 8) FESS-16G483042B 3419 6 X 4' X 8' STOCK	504.00	192.00	PI2_\$CLB	6.00	UN		6.00	208.278	1 249,67
SHEET SS 20G SS304-2B (4 X 8) FESS-20G483042B 3430 3 X 4' X 8' STOCK	150.72	96.00	PI2_\$CLB	3.00	UN		3.00	125.073	375.22
ROND SS304 5 1/2" DIA  N 1 X 8' 2-3 DAYS	0.00	1.00	UN	1.00	UN		1.00	2 485.000	2 485.00
ROUND SS 5/8 304 (R) * RSS-58	25.03	24.00	PI_\$CLB	24.00	PI		2.00	31.910	63.82
TUBE MEC 0.625 OD X .095 (R) * TME-0625095 6763 1 X 20' R/L 2-3 DAYS	10.76	20.00	PI_\$CPI	20.00	PI		1.00	59.190	59.19
TUBE MEC 0.750 OD X .095 (R) * TME-0750095 <b>8163</b> 1 X 20' R/L 2-3 DAYS	13.30	20.00	PI_\$CPI	20.00	PI		1.00	48.190	48.19
TUBE MECH. 0.75 X .083 (R)  N 1 X 20' R/L 2-3 DAYS	0.00	1.00	UN	1.00	UN		1.00	69.000	69.00
TUBE MEC 1.000 OD X .120 (R) * TME-1000120 6505  2 X 20' R/L STOCK	22.56	20.00	PI_\$CPI	20.00	PI		1.00	49.390	49.39

Date:

Next Page...



#### **ACIER OUELLETTE INC.**

935, Boul. du Hâvre

Salaberry de Valleyfield (Québec) J6S 5L1

Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

# Quotation

SOU0087982

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST. HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att: CHANTAL LAVOIE Tél.: 613-632-5200

Customer N°

CLI0001056

Date

2018/02/22

Revision N°

0

Prices valid until

2018/03/01

Your Order No Processed by

Josianne Bourdon

Salesman

**JOSIANNE** 

Carrier

OUELLE SDV

Credit Terms

Net 30 Days

Page

3

Product N° and description	Weight	Qty	U/M	Qty	U/M	Price	Pcs Nb	Price	Amoun
ROUND 4140 HEAT TREAT 1 (R) *  R4140-1H	53.40	20.00	PI_\$CLB	20.00			1.00	83.280	
FLAT ALD-1/2 X 12 6061-T6 * FAL-1212 7447 2 X 12' STOCK	169.39	24.00	PI_\$CLB	24:00	PI		2.06	276.065	- ' '
FLAT ALU 1/2 X 5 6061-T6 * FAL-125 2 X 12' STOCK	70.58	24.90	PI_\$CLB	24.00	PI		2.00	116.445	232.89
FLAT ALU 3/4 X 4 6061-T6 * FAL-344 <b>2596</b> 1 X 12' STOCK	42.29	12.00	PI_\$CLB	12.00	PI		1.00	125.150	125.15
SQUARE ALU 1 6061-T6 * CAL-1 1781 2 X 12' STOCK	28.22	24.00	PI_\$CLB	24.00	PI		2.00	38.940	77.88
AL. PLAT 1" X 1 3/4" N 1 X 12' 4-7 DAYS	0.00	1.00	UN	1.00	UN		1.00	242.000	242.00
FLAT ALU 1 X 2 6061-T6 * FAL-12 <b>2497</b> 2 X 20' STOCK	96.00	40.00	PI_\$CLB	40.00	PI		2.00	149.255	298.51 7.462
FLAT ANL 1 1/2 X 2 1/2 6061-T6 * FAL-112212 2439 5 X 12' STOCK	264.36	60.00	PI_\$CLB	60.00	PI		5.00	172.336	861.68 U 36133
CARREAL. 2 1/4" 6061T6  1 X 12' 4-7 DAYS	0.00	1.00	UN	1.00	UN		1.00	386.000	386.00
FAC 112212 2439 1 X 12' STOCK	52,87	12.00	PI_\$CLB	12.00	PI		1.00	172.340	172.34

Date:

Next Page...

DATE: M					PO / BATCH	NO.: <u>⊘</u> 3	9126/50486	
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	12 17	THICKNESS ORDERED: 1.000 THICKNESS RECEIVED: 1.000 SHEET SIZE ORDERED: NA SHEET SIZE RECEIVED: NA						
DESCRIPTION	(Ch	CR neck (N)			COMMENT	S		
SURFACE DAMAGE	Y	(N						
CORRECT FINISH	(Y)	N						
CORROSION	Y	(N)						
CORRECT GRAIN DIRECTION	(Y)	N						
CORRECT MATERIAL PER M-DRAWING	(8)	N	AGTIM A	SO				
CORRECT THICKNESS	Y	Ŋ						
PHOTO REQUIRED	Y	(4)						
CORRECT REF # TO LINK CERT	(1)	N	Heat # 4	11980	5-			
CORRECT MATERIAL IDENTFICATION	~	N						
CORRECT M# ON THE MATERIAL	Y	N						
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	N						
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	(N)						
CUT SAMPLE PIECE			TERIAL AND PR		A HARDNES	S CHECK	<i>.</i>	
			HRC H		DUR A	DUR D	WEBSTER	
TYPE OF MATERIAL				-	201171	DOIND	VVLDOTEN	
SIZE OF TEST SAMPLE								

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: DAS	SIGNED OFF BY:
DATE: MAR 0 7 2018	DATE:

IN 2012 -09-24

PURCHASE MATERIAL: AISI 1018-1025 ROUND BAR

MIL-S-7097 OR ASTM A108 SPECIFICATION:

M1018-R D.DDD WHERE D.DDD = DIAMETER IN INCHES DIA. PART NUMBER:

EG. 7/8" ROUND BAR = M1018-R0.875 TOLERANCES:

TOLERANCE +0.000/-0.002 +0.000/-0.003 +0.000/-0.005 +0.000/-0.005 PER ASTM A108 AS FOLLOWS: SIZE UP TO 1.5" INCL. OVER 1.5" TO 2.5" INCL. OVER 2.5" TO 4.0" INCL. OVER 4.0" TO 8.0" INCL.

SHEET 1 OF 1 REV. B 12 09 05 01 06.12 DATE NTS DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO
M1018-R 1018-1025 ROUND BAR COPPRIGHT © 2001 BY DARY AEROSPACE LTD 195 COCCUPATION TO THE THE SECOND CP DS 8 REFORMAT, ADD ASTM A108, ADD TOLERANCES
A NEW ISSUE So CHECKED A-MFG. APPR. APPROVED - VMD DE APPR. APPROVED DATE 12.09.05 DESIGN

U

Ω

2

SPECIFICATION CONTROL DRAWING

MATERIAL: _ DATE: _	MAR 0 7 7818	PO/BATCH NO: 039126 /504831
MATERIAL CERT REC'D: _ QUANTITY RECEIVED: _ QUANTITY INSPECTED: _ QUANTITY REJECTED: _	Yes 12' 12'	THICKNESS ORDERED: 0.375 THICKNESS RECEIVED: 0.375 SHEET SIZE ORDERED: 111 SHEET SIZE RECEIVED: 114

DESCRIPTION	(Cł	CR neck (N)	COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(4)	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	M	N	Astm AINX
CORRECT THICKNESS	TY	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	Heat # 41776 6 M
CORRECT MATERIAL IDENTFICATION	Y	Ν	
CORRECT M# ON THE MATERIAL	(Y)	Ν	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	(N)	

CUT SAMPLE PIECE OF	MATERIAL A			SS CHECK.	
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:_	DAS	SIGNED OFF BY:
DATE:	S-3MAR 0 7 2018	DATE:

1 2012 -09-24

REV. B SCALE CP 12 09.05 DS 01.06 12 SHEET 1 OF 1 DATE DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO.
M1018-R COPYRIGHT © 2001 BY DART AEROSPACE LTD TITLE 1018-1025 ROUND BAR B REFORMAT, ADD ASTM A108, ADD TOLERANCES
A NEW ISSUE 8000 DRAWN CP CHECKED A-P MFG APPR. APPROVED APPR. DE APPR. DATE 12.09.05 DESIGN

9

PURCHASE MATERIAL: AISI 1018-1025 ROUND BAR SPECIFICATION: MIL-S-7097 OR (\$STM A108)

3

SPECIFICATION CONTROL DRAWING

PART NUMBER:

M1018-R D. DDD WHERE D. DDD = DIAMETER IN INCHES DIA.

EG. 7/8" ROUND BAR = M1018-R0.875

PER ASTM A108 AS FOLLOWS:

TOLERANCES:

TOLERANCE +0.000/-0.003 +0.000/-0.004 +0.000/-0.005 +0.000/-0.006

SIZE UP TO 1.5" INCL. OVER 1.5" TO 2.5" INCL. OVER 2.5" TO 4.0" INCL. OVER 4.0" TO 6.0" INCL. OVER 6.0" TO 8.0" INCL.

٥

MATERIAL: M3C	AR 0	30:	750X 2	2.500	PO	) / BATCH	1 NO.: <u>@39</u> /	126/5048
MATERIAL CERT REC'D:	10	ς		ТІ	HICKNE	SS ORDE	RED:	750
QUANTITY RECEIVED:	QUANTITY RECEIVED: 36							
QUANTITY INSPECTED:							RED:	
QUANTITY REJECTED:								1//
				31	ILET SI	ZE NEGE	IVED:	<u>//-t</u>
DESCRIPTION	NO (Ch	eck			C	OMMEN	TS	
SURFACE DAMAGE	Y	N	)			-		
CORRECT FINISH	B	N						
CORROSION	Y	N						
CORRECT GRAIN DIRECTION	(Y)	N	4					
CORRECT MATERIAL PER M-DRAWING	Y	Ν	Astw	1 A 2	76		-	
CORRECT THICKNESS	D	N		7				
PHOTO REQUIRED	Υ	M)						
CORRECT REF # TO LINK CERT	(V)	N	Hast	# 261	600			
CORRECT MATERIAL IDENTFICATION	(7)	N		1				-
CORRECT M# ON THE MATERIAL	M	N						
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	(N)						
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	N						
CLIT CAMPLE DIFOR	- 05	144	TEO141 AN	10.00==0				
CUT SAMPLE PIECE			DRD RESU			IARDNE	SS CHECK.	
	T		HRC T	HRB		UR A	DUR D	WEBSTER
TYPE OF MATERIAL BIZE OF TEST SAMPLE HARDNESS / DUROMETER READII				11110		OKA	DOIND	WEBSTER
IANDINESS / DURUNIETER READII		-4			***			
	te	sters	located in the	ne Quality O	ffice			

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY:	SIGNED OFF BY:
DATE: 9-3 MAR 0 7 2018	DATE:

REV. C SHEET 1 OF 1 NTS 10.11.25 09.07.15 05.06.10 DATE DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWINIG NO.
M304B 304/316 BAR/PLATE
COPYRIGHT © 2005 BY DAT ARROSPACE LTD
WE DOZDANE WANTE DOCUMENT ON THE CONSTRUCTION OF T F MB S ADDED PLATE TO PURCHASE MATERIAL, ADDED PLATE ERCH TES PSEPERICATIONS, AADD EG. CHANGED TITLE FROM "904316 BAR" 10" "304/316 BAR" 10" TO" TESTERMAT DWG, ADD SPECS (ZN D6-1), REF PAR 86-0204, CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE DESIGN 8 REV.

⋖

10.11.25

SPECIFICATION CONTROL DRAWING

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PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE (NOTE: AISI 304/316 SS PLATE)

Ω

SPECIFICATION: PART NUMBER:

M304BT.TTT X WW.WWW ASTM A276 OR ASTM A240

WHERE "T.TTT" = THICKNESS IN INCHES AND "WW.WWW" = WIDTH IN INCHES

EG. 0.5" x 3.0" BAR = M304B0.500X03.000

O

MATERIAL: MA	061 RU	116	BU,7	<u>50</u> 00° 	4,000	PO / BAT	CH NO.:	039	9126/50486
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	12	1		- - -	THIC	CKNESS OR CKNESS REC ET SIZE OR ET SIZE REC	CEIVED: DERED:		750 V/A V/A
DESCRIPTION	(CF	CR neck (N)		-		СОММЕ	ENTS		
SURFACE DAMAGE		(N)	<del>                                     </del>				-		
CORRECT FINISH	(Y)	N					-		
CORROSION	Y	N					***************************************		
CORRECT GRAIN DIRECTION	(Y)	N							
CORRECT MATERIAL PER M-DRAWING	(Y)	N	Astu	n B.	221				
CORRECT THICKNESS	(Y)	N				-			
PHOTO REQUIRED	Y	(N)							
CORRECT REF # TO LINK CERT	(7)	N	Han	114	074	10			
ORRECT MATERIAL IDENTFICATION	(4)	N		7	<u> </u>				
CORRECT M# ON THE MATERIAL	M	N			-				
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	(N)							
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	(2)							
CUT SAMPLE DIECE	= 0=	1447	FEDIAL	AND DE	FF05:	4.4.1.4.55	1500 -		
CUT SAMPLE PIECE	_	IVIA	JOD DC	אואט אל	EFURI	VI A HARDN	IESS C	HECK.	
			ORD RE				1 5	115	1.00
YPE OF MATERIAL			TING	HF	70	DUR A	D	UR D	WEBSTER
IZE OF TEST SAMPLE									
ARDNESS / DUROMETER READI	ا مر								

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: 44	SIGNED OFF BY:
DATE: 9-83 MAR 0 7 2018	DATE:

RELEASED 2009 -05- 03

REV. B SHEET 1 OF 1 09.07.13 01.06.08 DATE DART AEROSPACE LTD

HANWESBURY, ONTARIO, CANADA

JS DRAVINIG NO.

M6061T6B

SHEE 8 8 B REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B21/19221 (ZN D7-1) - 6061-T6 BAR SO DESIGN DS
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DE APPR.
DOATE
09.07.13 NEW ISSUE REV

NTS

COPYRIGHT © 2001 BY DART AEROSPACE LTD CEMPLE WIND CONTROL AND ENVIRES COMMISSION OF THE CHANGES COMMING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION CONTROL DRAWING

0

SPECIFICATION:

QQ-A-225/8 OR AMS-OQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR QQ-A-200/8 OR AMS-OQ-A-200/8 (OR AMS 4160) OR ASTM B211 OR ASTM B221

M6061T68 T.TTT | X WW.WWW WIDTH THICK

PART NUMBER:

**8** 

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WHERE "T.TTT" = THICKNESS IN INCHES "WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

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MATERIAL: MOO	617 AR 0	7 71	2.000x01,250 PO/BATCH NO: 039/26/50486
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	Ye 12 12	75	THICKNESS ORDERED: 01.250 THICKNESS RECEIVED: 01.250 SHEET SIZE ORDERED: 11.4 SHEET SIZE RECEIVED: 11.4
DESCRIPTION	(Ch	CR eck (N)	COMMENTS
SURFACE DAMAGE	Υ	(N')	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	1		
CONNECT GRAIN DIRECTION	(Y)	N	•
ORRECT MATERIAL PER M-DRAWING	8	N	Astm B221

CUT SAMPLE PIECE OF	MATERIAL A	ND PREFOR	M A HARDNE	SS CHECK	
		SULTS BELOV			
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					-
HARDNESS / DUROMETER READING					

(N)

N

N

N

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: MAR 0 7 2018	SIGNED OFF BY:
DATE: 9-39	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

PHOTO REQUIRED

CORRECT REF # TO LINK CERT

CORRECT M# ON THE MATERIAL

DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF DOES THIS REQUIRE AN EXTRUSION REPORT

CORRECT MATERIAL IDENTFICATION (Y)

REV. B SHEET 1 OF 1 09 07 13 DS 01 06.08 DATE DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
S DRAWING NO.
M606176B 6061-T6 BAR COPPRIGHT © 2001 BY DARY AEROSPACE LTD OD B REMOVE QQ.A-250/11 OPTION, REFORMAT NOTES, ADD ASTM 8211/8221 (ZN D7-1) TITLE MFG. APPR.
APPROVED
DE APPR.
DATE 09.07.13 A NEW ISSUE DRAWN DESIGN REV.

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:

00-A-225/8 OR AMS-00-A-225/8 (OR AMS 4117/4128/4115/4116) OR 00-A-200/8 OR AMS-00-A-200/8 (OR AMS 4160) OR ASTM B211 OR ASTM B2217)

PART NUMBER:

M6061T6B T.TTT X WW.WWW

WHERE "T.TTT" = THICKNESS IN INCHES "WW.WWW" = WIDTH IN INCHES WIDTH THICK

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

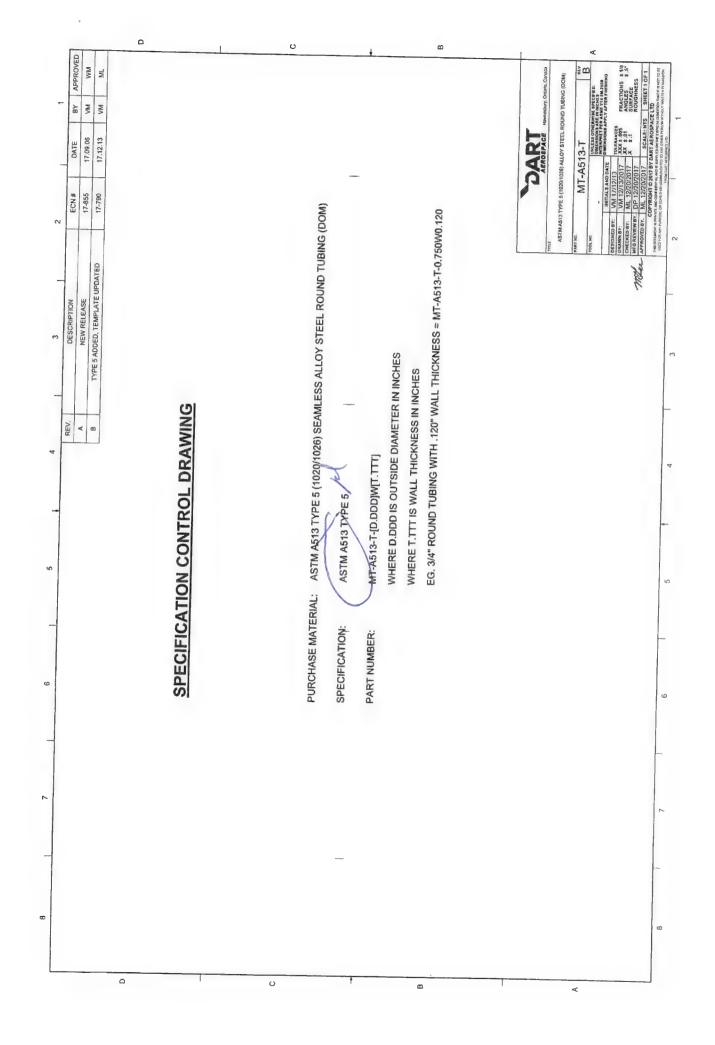
**B** 

SPECIFICATION CONTROL DRAWING

MATERIAL: <u>MT-</u> DATE:	A51	31	1.000	W,120		PO / BATC	H NO.:039	126/5048
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	1es 23 23	;			THICK THICK SHEE	NESS RECE TSIZE ORDI	ERED: W. EIVED: W. EIVED: N	
DESCRIPTION	NC (Che	ck				COMMEN	its	
SURFACE DAMAGE	1	N'						
CORRECT FINISH	2000	N						
CORROSION		N)						
CORRECT GRAIN DIRECTION	_	N	-					
CORRECT MATERIAL PER M-DRAWING	-	Ν	Astin	Ah	12			
CORRECT THICKNESS	(Y)	N			<del></del>			
PHOTO REQUIRED	Y (	N)	1 0					
CORRECT REF # TO LINK CERT	0	N	Herta	<b>中</b> 03	795	21		
CORRECT MATERIAL IDENTFICATION	(Y)	N	1	100		7		
CORRECT M# ON THE MATERIAL	(Y)	N						
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	(V)						
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N						
		<del>)'</del>						
CUT SAMPLE PIECE	OFN	/IAT	FRIAL AN	ID PREF	ORM	A HARDNE	SS CHECK	
	RE	CC	RD RESL	II TS RE	OW	A HANDINE	.33 UREUK.	
			HRC I	HRB		DUR A	DUR D	WEBSTER
YPE OF MATERIAL		_				DONA	DOND	VVEDSTER
SIZE OF TEST SAMPLE								1
ARDNESS / DUROMETER READIN	NG					-	-	<del>                                     </del>

testers located in the Quality Office

QC 18 INSPECTION	:	ENGINEERING SIGNOFF (if required)
INSPECTED BY:	DAS 44	SIGNED OFF BY:
DATE:	S-MAR 0 7 2018	DATE:



MATERIAL: DATE	MAR 0 7 2018	PO / BATCH NO.: 039/26 /504865 3
MATERIAL CERT REC'D QUANTITY RECEIVED QUANTITY INSPECTED QUANTITY REJECTED	26	THICKNESS ORDERED: 0,625 THICKNESS RECEIVED: 0,625 SHEET SIZE ORDERED: 0/A SHEET SIZE RECEIVED: 0/A

DESCRIPTION	(Ch	CR eck (N)	COMMENTS
SURFACE DAMAGE	Υ	(N)	
CORRECT FINISH	(	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	Ň	
CORRECT MATERIAL PER M-DRAWING	Y	N.	Actin A276
CORRECT THICKNESS	(	Ŋ	7970
PHOTO REQUIRED	Y	N	. 1
CORRECT REF # TO LINK CERT	$\mathcal{Y}$	Ν	Hest # 439067
CORRECT MATERIAL IDENTFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(8)	N	
DOES THIS MATERIAL REQUIRE	_	0	
ENGINEERING SIGN OFF	Υ	(V)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	(N)	

CUT SAMPLE PIECE OF	MATERIAL A			SS CHECK.	
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: DAS	SIGNED OFF BY:
DATE: MAR 0 7 2018	DATE:

REV. B SCALE SHEET 1 OF 1 AJS 08.03.03 8Y DATE 09.07.15 DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO.
M304R TITLE
304/316 ROUND BAR
COPYRIGHT © 1008 BY DART ARROSPACE LTD
IN TRACES OF THE PROSPACE LTD
IN THE REPORT OF THE PROSPACE TO THE PROSPA G C B REFORMAT DWG. ADD SPECS (ZN D6-1),
A NEW ISSUE DESIGN A CALCAGED MEG. APPR. APPROVED MEG. APPR. DE APPR. DE APPR. DATE 09.07.15

<

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR (NOTE: AISI 303 NpT ACCEPTABLE)

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ASTM A276 M304R D.DDD

SPECIFICATION: PART NUMBER:

WHERE "D.DDD" = DIAMETER IN INCHES EG. 0.75" ROUND BAR = M304R0.750

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SPECIFICATION CONTROL DRAWING

MATERIAL: <u>M304R5.500</u> DATE: <u>MAR () 7 7018</u>	PO / BATCH NO.: <u>039126 / S048652</u>
MATERIAL CERT REC'D:	THICKNESS ORDERED: 5.500 THICKNESS RECEIVED: 5.500 SHEET SIZE ORDERED: N/A SHEET SIZE RECEIVED: N/A

DESCRIPTION	(Cr	CR neck (N)	COMMENTS
SURFACE DAMAGE	Y	IN	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	Agter A276
CORRECT THICKNESS	(Y)	N	737 11 334 10
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	Y	N	Hext # 4/297
CORRECT MATERIAL IDENTFICATION	(X)	N	1121
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	R	
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ		

CUT SAMPLE PIECE OF	MATERIAL A			SS CHECK.	
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY:	SIGNED OFF BY:
DATE: 9-3MAKU /	ZU18 DATE:

REV. B SHEET 1 OF 1 09.07.15 AJS 08:03:03 DATE DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. M304R TITLE
304/316 ROUND BAR
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COPYRIGHT OF 100 B. ВУ B REFORMAT DWG. ADD SPECS (ZN D6-1),
A NEW ISSUE DESCRIPTION DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DE APPR.
DE APPR. REV.

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR (NOTE: AISI 303 NOT ACCEPTABLE)

ASTM A276 SPECIFICATION: PART NUMBER:

M304R D.DDD DIA.

WHERE "D.DDD" = DIAMETER IN INCHES

EG. 0.75" ROUND BAR = M304R0.750

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SPECIFICATION CONTROL DRAWING

MATERIAL:	76961465.250 MAR 0 7 2018	PO / BATCH NO : <u>(239126/504865</u> 9
MATERIAL CERT REC'D: QUANTITY RECEIVED: QUANTITY INSPECTED: QUANTITY REJECTED:	7/25 37/12 5	THICKNESS ORDERED: 4250 THICKNESS RECEIVED: 4250 SHEET SIZE ORDERED: 477 SHEET SIZE RECEIVED: 477

DESCRIPTION	(Ch	CR leck (N)	COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	(Y)	M	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	6B-A-250/11
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Υ	N	
CORRECT REF # TO LINK CERT	8	N	Heat 11 16-39426053
CORRECT MATERIAL IDENTFICATION	(1)	N	
CORRECT M# ON THE MATERIAL	(A)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	(X)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	3 (	

CUT SAMPLE PIECE OF	MATERIAL A			SS CHECK.	
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: DAS	SIGNED OFF BY:
DATE: 9-39 MAR 0 7 2018	DATE:

DELEASED A 2009 -09- 10

REV. B. DS 01.06.08 BY DATE SHEET 1 OF 1 09.07.13 DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
ORAWING NO.
M6061T6S CP 6061-T6 SHEET SPEC REF PAR 08-020A. ADD 8208 SPEC (ZN D8-1). CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE
09.07.13 A NEW ISSUE DRAWN DESIGN REV.

PURCHASE MATERIAL: 6061-T6/T62 ALUMINUM SHEET

SPECIFICATION: QQ.4.256/41 DR AMS-4027 OR AMS 4025 OR AMS 4027 OR ASTM B209

M6061T6S XXX

PART NUMBER:

WHERE ".XXX" = SHEET THICKNESS (IN INCHES)

XXX BY 4FT BY 8FT PREFERRED SIZE:

EG. 0.063" THICK SHEET = M6061T6S.063

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SPECIFICATION CONTROL DRAWING

### MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MC	MAR 0 7 2018	PO/BATCH NO: 039/26/5048658
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	46812 96812 96812	THICKNESS ORDERED: 050 THICKNESS RECEIVED: 050 SHEET SIZE ORDERED: 4X12 SHEET SIZE RECEIVED: 4X12

DESCRIPTION	(Cr	CR leck (N)	COMMENTS
SURFACE DAMAGE	Y	IN	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	QQ-A-250/11
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Q	N	Heatth 32115/01
CORRECT MATERIAL IDENTFICATION	Y	N	100/01
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	R	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	3	

CUT SAMPLE PIECE OF	MATERIAL A			SS CHECK.	
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY:	SIGNED OFF BY:
DATE: 9-89 MAR 0 7 2018	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

DELEASE 2009 -09-10

SCALE REV. B NTS SHEET 1 OF 1 01 06 08 09 07 13 DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
- DRAWING NO.

W6061T6S
SHEE COPYRIGHT & 2001 BY DART AEROSPACE LTD DS CP 6061-T6 SHEET SPEC B REFORMAT DWG. ADD B209 SPEC (ZN D8-1).
A NEW ISSUE THE BOOLWDATE MAN 09.07.13 APPROVED MFG. APPR. CHECKED DE APPR. DRAWN DESIGN A REV

WHERE ".XXX" = SHEET THICKNESS (IN INCHES) QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS-7025 OR AMS 4027 OR ASTM B209 M6061T6S XXX PART NUMBER:

PURCHASE MATERIAL: 6061-T6/T62 ALUMINUM SHEET

SPECIFICATION: A

PREFERRED SIZE:

EG. 0.063" THICK SHEET = M6061T6S.063

XXX BY 4FT BY 8FT

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SPECIFICATION CONTROL DRAWING

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### MATERIAL RECEIPT INSPECTION FORM

MATERIAL:	MAR 0 7 2018	PO / BATCH NO.:	039126/504865
MATERIAL CERT REC'D: QUANTITY RECEIVED: QUANTITY INSPECTED: QUANTITY REJECTED:	1968 196912 96912	THICKNESS ORDERED: THICKNESS RECEIVED: SHEET SIZE ORDERED: SHEET SIZE RECEIVED:	206A 206A 4x8 4x8

DESCRIPTION	(Ch	CR neck (N)	COMMENTS
SURFACE DAMAGE	Y	N'	
CORRECT FINISH	(Y)	N	
CORROSION	Y	W	
CORRECT GRAIN DIRECTION	(1)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	Asme 54240
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	Y	N	Heat # 863274
CORRECT MATERIAL IDENTFICATION	V	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	(N)	

CUT SAMPLE PIECE OF	MATERIAL A			SS CHECK.	
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY:	SIGNED OFF BY:
DATE: S-3 MAR 0 7 2018	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

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9

PURCHASE MATERIAL: AISI 304/316 SS SHEET ANNEALED

SPECIFICATION:

MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240

FINISH

DART M-NUMBER IDENTIFIER 1P FINISH UNPOLISHED No. 1 UNPOLISHED No. 2B UNPOLISHED No. 3B POLISHED No. 4 BUFFED No. 6 BUFFED No. 7

M304S TT GA #P PART NUMBER:

EG. 16 GAUGE SS SHEET 28 FINISH = M304S16GA EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P WHERE "#P" = GAUGE THICKNESS WHERE "#P" = FINISH IDENTIFIER

GAUGE THICKNESS REFERENCE:

NOM. THICK.

THICKNESS

RAMSE [(IN)

0.0178 - 0.019

0.0178 - 0.029

0.027 - 0.026

0.027 - 0.026

0.033 - 0.025

0.035 - 0.046

0.047 - 0.058

0.059 - 0.114

0.015 - 0.026

0.115 - 0.012

0.115 - 0.126

0.116 - 0.126

0.116 - 0.126

0.1176 - 0.127

0.117 - 0.128

0.118 - 0.129

0.118 - 0.129

0.119 - 0.129

0.119 - 0.129

0.110 - 0.129

0.224 - 0.228

0.254 - 0.278

0.254 - 0.278

0.254 - 0.278

0.254 - 0.278

0.254 - 0.278 (IN) 0.01875 0.018875 0.0283 0.038125 0.034375 0.034375 0.04375 0.04375 0.06625 0.06625 0.078125 0.078125 0.109375 0.108375 0.108375 0.108375 0.108375 0.108375 0.108375 0.108375 0.108375 0.108375 0.108375

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RELEASED

2015 FEB 04 ECN 15-522

REV. D SCALE NTS SHEET 1 OF 1 15.01.06 10.90.60 12.09.20 01.09.24 DATE DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. COPYRIGHT © 2001 BY DART AEROSPACE LTD
THE USE USE FRANKE AND STATE IS ON THE ENGINE AND STATE USE OF THE DISPLANCE. AJS SQ MB CP ВУ REFORMAT DWG, ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 08-020A 304/316 SS SHEET DEFINED FINISH OPTION (ZN C8) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 28 (ZN 85). DESCRIPTION M304S D ADDED GAUGES 0-7. Sa 15.01.06 NEW ISSUE MFG. APPR. APPROVED DE APPR. CHECKED DESIGN DRAWN 8 O REV. DATE

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### MATERIAL RECEIPT INSPECTION FORM

MATERIAL: _ DATE: _	M3045/66A MAR 0 7 2018	PO / BATCH NO.: 039/26/5048650
MATERIAL CERT REC'D: QUANTITY RECEIVED: QUANTITY INSPECTED: QUANTITY REJECTED:	7.65 192°2 192°2	THICKNESS ORDERED: 166A THICKNESS RECEIVED: 166A SHEET SIZE ORDERED: 4X8 SHEET SIZE RECEIVED: 4X8

DESCRIPTION	(Ch	CR eck (N)	COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	(4)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	A51m A240
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	<b>(V)</b>	N	Heat # 514212
CORRECT MATERIAL IDENTFICATION	(8)	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	(Z)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	(2)	

CUT SAMPLE PIECE OF	MATERIAL A			SS CHECK.	
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: _	DAS	SIGNED OFF BY:
DATE:	9-89MAR 0 7 2018	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET ANNEALED

SPECIFICATION:

FINISH

DART M-NUMBER IDENTIFIER 1P FINISH
UNPOLISHED No. 1
UNPOLISHED No. 2D
UNPOLISHED No. 2B
POLISHED No. 3
POLISHED No. 4
BUFFED No. 6
BUFFED No. 7

M304S TT GA #P PART NUMBER:

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WHERE "#P" = GAUGE THICKNESS WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

NOM. THICK.

THICKNESS RANGE (IN) 0.0178 - 0.010 (IN) 0.001875 0.021875 0.022125 0.03125 0.034375 0.04375 0.04375 0.0625 0.0625 0.0625 0.0625 0.0625 0.0625 0.06375 0.06375 

RELEASED ECN 15-122 4 2015 FEB 04

DATE DATE TD  A REV. D SHEET 1 OF 1 SCALE NTS  A PRESENTING THE NTS  THE TO THE	CE LI	DART AEROSPACE LID	8 8 8 8	PPR. VED	REV DESIGN DESIGN DRAWN CHECKEN MFG. APPR. APPROVED DE APPR. DATE
REV. D SHEET 1 OF 1		M304S	14/	PPR	MFG. A
		DRAWING NO.	50	8	CHECK
2 4	CANAL	HAWKESBURY, ONTARK	A.S	7	DRAW
2	CE LI	DART AFROCPA	Sq	7	DESIGN
DATE	ВУ	DESCRIPTION			REV
01.09.24	DS		SSUE	NEW ISSUE	٧
09.06.01	8	REFORMAT DWG, ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 08-020A	RMAT DWG, ADD E REF (C8-1), RE	GAUGE	60
12.09.20	MB	DEFINED FINISH OPTION (ZN C8) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 28 (ZN 85).	ED FINISH OPTIC	MATER	o
15.01.06	AJS		ADDED GAUGES 0-7.	ADDEC	٥

### MATERIAL RECEIPT INSPECTION FORM

MATERIAL:	BO45:18(-A MAR 0 7 2018	PO / BATCH NO.: 039126/504864
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	400 E 64012	THICKNESS ORDERED: 186A THICKNESS RECEIVED: 186A SHEET SIZE ORDERED: 4x8 SHEET SIZE RECEIVED: 4x8
DESCRIPTION	NCR (Check Y/N)	COMMENTS

DESCRIPTION	(CI	CR neck /N)	COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Υ	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASME SAZYO
CORRECT THICKNESS	(Y)	N	THE VALUE
PHOTO REQUIRED	Y	(1)	A
CORRECT REF # TO LINK CERT	(Y)	N	Heat # 62513CO3
CORRECT MATERIAL IDENTFICATION	0	N	THE FLOTION
CORRECT M# ON THE MATERIAL	M	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	(N)	

CUT SAMPLE PIECE OF	MATERIAL A	ND PREFOR	M A HARDNE	SS CHECK.	
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: 11	SIGNED OFF BY:
DATE: 9-8 MAR 0 7 2018	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

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PURCHASE MATERIAL: AISI 304/316 SS SHEET ANNEALED

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SPECIFICATION:

MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240

FINISH

FINISH UNPOLISHED No. 1 UNPOLISHED No. 2B UNPOLISHED No. 3 POLISHED No. 4 BUFFED No. 6 BUFFED No. 6

M304S TT GA #P

PART NUMBER:

U

WHERE "#P" = GAUGE THICKNESS WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

NOM. THICK.
(IN)
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0.021875
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RELEASED 2015 FEB 0 4

ECN 15-522 9

15.01.06 12.09 20 AJS WB REFORMAT DWG, ADD ASTMIASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 08-020A DEFINED FINISH OPTION (2N C8) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 28 (2N 85). D ADDED GAUGES 0-7.

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10.90.60

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×	NEW ISSUE	SUE		SO	01.09.24
REV			DESCRIPTION	ВУ	DATE
DESIGN	7	SQ	DART AFPOSPACE ITD	CELL	9
DRAWN	7	A.S	HAWKESBURY, ONTARIO, CANADA	D. CANAD	<b>2</b> 4
CHECKED	ED	24	DRAWING NO.		REV D
MFG. APPR.	PPR	1	M304S		SHEET 1 OF 1
<b>APPROVED</b>	VED	C MIN	TITLE		SCALE
DE APPR.	ď.	7	304/316 SS SHEET		NTS
DATE	15.0	15.01.06	Pure population for succession and s	ROSPACE N THE EUTHERS	LTD CO-00104 1441 ft is

### MATERIAL RECEIPT INSPECTION FORM

MATERIAL CERT REC'D: 105  QUANTITY RECEIVED: 9602  QUANTITY INSPECTED: 9602  QUANTITY REJECTED: 9602  SHEET SIZE ORDERED: 116A  SHEET SIZE ORDERED: 116A  SHEET SIZE ORDERED: 116A  SHEET SIZE RECEIVED: 116A  COMMENTS  SHEET SIZE RECEIVED: 116A  COMMENTS  SHEET SIZE RECEIVED: 116A  COMMENTS  COMMENTS  ORDERECT FINISH (Y) N  CORRECT GRAIN DIRECTION (Y) N  CORRECT GRAIN DIRECTION (Y) N  CORRECT MATERIAL PER M-DRAWING (Y) N  CORRECT MATERIAL IDENTFICATION (Y) N  CORRECT MATERIAL REQUIRE AN  ENGINEERING SIGN OFF  Y N  COUNTY SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.	MATERIAL:M	AR 0 7 2018	PO /	PO/BATCH NO.: PO039/26/504					
DESCRIPTION  (Check Y/N)  SURFACE DAMAGE Y N  CORRECT FINISH Y N  CORROSION Y N  CORRECT GRAIN DIRECTION Y N  CORRECT MATERIAL PER M-DRAWING Y N  PHOTO REQUIRED Y N  CORRECT MATERIAL IDENTFICATION N  CORRECT MATERIAL IDENTFICATION N  CORRECT M# ON THE MATERIAL Y N  DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF Y N  DOES THIS REQUIRE AN EXTRUSION REPORT Y N  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK	QUANTITY RECEIVED: QUANTITY INSPECTED:	1.65 96913 16912	THICKNESS SHEET SIZE	RECEIVED:	116A 16A 4x8 4x8				
SURFACE DAMAGE CORRECT FINISH CORRECT FINISH CORRECT GRAIN DIRECTION CORRECT MATERIAL PER M-DRAWING CORRECT THICKNESS PHOTO REQUIRED CORRECT REF # TO LINK CERT CORRECT MATERIAL IDENTFICATION CORRECT M# ON THE MATERIAL DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF DOES THIS REQUIRE AN EXTRUSION REPORT  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK	DESCRIPTION	(Check	COF	MMENTS					
CORRECT FINISH  CORROSION  CORRECT GRAIN DIRECTION  CORRECT MATERIAL PER M-DRAWING  CORRECT THICKNESS  PHOTO REQUIRED  CORRECT REF # TO LINK CERT  CORRECT MATERIAL IDENTFICATION  CORRECT M# ON THE MATERIAL  DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF  DOES THIS REQUIRE AN EXTRUSION REPORT  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK	SURFACE DAMAGE								
CORRECT GRAIN DIRECTION (Y) N  CORRECT MATERIAL PER M-DRAWING (Y) N  CORRECT THICKNESS (Y) N  PHOTO REQUIRED (N)  CORRECT REF # TO LINK CERT (N) N  CORRECT MATERIAL IDENTFICATION (N) N  CORRECT M# ON THE MATERIAL (N) N  DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF (Y)  DOES THIS REQUIRE AN EXTRUSION REPORT (Y)  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK									
CORRECT GRAIN DIRECTION (Y) N  CORRECT MATERIAL PER M-DRAWING (Y) N  CORRECT THICKNESS (Y) N  PHOTO REQUIRED Y (N)  CORRECT REF # TO LINK CERT (Y) N  CORRECT MATERIAL IDENTFICATION (X) N  CORRECT M# ON THE MATERIAL (Y) N  DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF Y  DOES THIS REQUIRE AN EXTRUSION REPORT Y N  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK									
CORRECT THICKNESS (Y) N PHOTO REQUIRED Y (N)  CORRECT REF # TO LINK CERT (Y) N CORRECT MATERIAL IDENTFICATION (Y) N CORRECT M# ON THE MATERIAL (Y) N  DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF Y DOES THIS REQUIRE AN EXTRUSION REPORT Y  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK									
CORRECT THICKNESS PHOTO REQUIRED CORRECT REF # TO LINK CERT ON N CORRECT MATERIAL IDENTFICATION CORRECT M# ON THE MATERIAL DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF DOES THIS REQUIRE AN EXTRUSION REPORT  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK		(Y) N AST	1 A240						
CORRECT REF # TO LINK CERT		(Y) N	7,70						
CORRECT MATERIAL IDENTFICATION N CORRECT M# ON THE MATERIAL Y N  DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF Y N  DOES THIS REQUIRE AN EXTRUSION REPORT Y N  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK		Y (N)							
CORRECT MATERIAL IDENTFICATION (V) N  CORRECT M# ON THE MATERIAL (V) N  DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF Y  DOES THIS REQUIRE AN EXTRUSION REPORT Y  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK		(V) N Hert	#459P						
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF  DOES THIS REQUIRE AN EXTRUSION REPORT  Y  N  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK		(V) N	H-IVII						
ENGINEERING SIGN OFF Y N  DOES THIS REQUIRE AN EXTRUSION REPORT Y N  CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK		(Y) N							
DOES THIS REQUIRE AN EXTRUSION REPORT Y NO CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK		YN							
CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK		Y (N)							
CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.									
	CUT SAMPLE PIECE	OF MATERIAL A	ND PREFORM A HAP	RDNESS CHECK	ζ.				
RECORD RESULTS BELOW		RECORD RES	ULTS BELOW						
TYPE OF MATERIAL HRC HRB DUR A DUR D WEBSTER	TYPE OF MATERIAL	HRC	HRB DUR	A DUR D	WEBSTER				
SIZE OF TEST SAMPLE									
HARDNESS / DUROMETER READING									
testers located in the Quality Office	INTOINE SO / DUROWETER READIN								

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
DAS	E. CONTECTANO SIGNOFF (II required)
INSPECTED BY:	SIGNED OFF BY:
DATE: 9-89MAR 0 7 2018	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

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PURCHASE MATERIAL: AISI 304/316 SS SHEET ANNEALED MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 SPECIFICATION:

FINISH:

DART M-NUMBER 10ENTIFIER 10 2D NONE 39 46 66 77 89 FINISH UNPOLISHED No. 1 UNPOLISHED No. 2D POLISHED No. 3 POLISHED No. 6 BUFFED No. 6 BUFFED No. 6

M304S TT GA #P PART NUMBER:

WHERE "#P" = GAUGE THICKNESS WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 28 FINISH = M304S16GA EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

0.024 - 0.026 0.027 - 0.029 0.036 - 0.035 0.036 - 0.040 0.041 - 0.046 0.041 - 0.046 0.053 - 0.065 0.066 - 0.072 0.066 - 0.096 0.099 - 0.114 0.115 - 0.130 0.131 - 0.146 0.131 - 0.146 0.131 - 0.146 0.131 - 0.146 0.131 - 0.130 THICKNESS RANGE (IN) 0.0178 - 0.019 0.0199 - 0.023 NOM. THICK. 

RELEASED ECN 15-522 9 2015 FEB 04

4000	12.09.20	09 06 01		01.09.24	DATE	45	2 6		KEV.	SHEET 1 OF	SCALE	NTS	LTD ODEMONTHS ITE	The second designation of the second designa
9 4	SE SE	å	1	3 8	à	120	CANA	2					ROSPACE I NE DONES	
	DEFINED FINISH OPTION (ZN CB) AND FXAMPLE OF MATERIAL P/N WITH FINISH OTHER THAN 2R /7N BK.	REFORMAT DWG, ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 08-020A		DESCRIPTION		DART AFRONDACE ITD	HAWKESBURY ONTARIO CANADA	DRAWING NO.	M304S	TIME	304/346 CC CLIEFT	1 1 1 0 0 0 0 1 C/FOC	COPYRIGHT © 2001 BV DART AEROSPACE LTD  THIS DOCUMENT BY DAY EAST AND A SEPTICE OF THE EXPERTS CONCINENT IT IS, WITH TO BY USED FOR JAMP AND ASSESSED.	The same of the sa
ADDED GAUGES 0-7.	INED FINISH OPT	ORMAT DWG, ADI	NEW ISSUE		30	2	A/S	041	1/1	C. Var	1	4	15.01.06	
700	C DEF	B REF	A NEV	REV	DESIGN		DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR		DATE 15	

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### MATERIAL RECEIPT INSPECTION FORM

MATERIAL: <u>M30</u>	MAR	7	25×6.000	PO / BATC	:H NO.: <u>039</u>	126/504864
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	4 6 6	5	THI SHE	CKNESS ORD CKNESS RECE EET SIZE ORD EET SIZE RECE	EIVED: O.	625 625 1/A
DESCRIPTION	(CI	CR neck /N)		COMMEN	ITS	
SURFACE DAMAGE	Y	M)				
CORRECT FINISH	(7)	N				
CORROSION	Y	(N)				
CORRECT GRAIN DIRECTION	N	N				
CORRECT MATERIAL PER M-DRAWING	N	N	Action AJUS			
CORRECT THICKNESS	(Y)	N	IBIM ALTO			
PHOTO REQUIRED	Y	(N)				
CORRECT REF # TO LINK CERT	(4)	N	Host H 702	11-2		
CORRECT MATERIAL IDENTFICATION	0	N	many to road	OFIE		
CORRECT M# ON THE MATERIAL	R	N				
DOES THIS MATERIAL REQUIRE						
ENGINEERING SIGN OFF	Υ	N				
DOES THIS REQUIRE AN						
EXTRUSION REPORT	Υ	(N)				
CUT SAMPLE PIECE	OF	MAT	ERIAL AND PREFOR	M A HARDNE	SS CHECK	
	F	RECC	RD RESULTS BELOV	V	0112014	
TVDE OF MATERIA			IRC HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL						1120121
SIZE OF TEST SAMPLE						
HARDNESS / DUROMETER READIN	VG					
	te.	sters	ocated in the Quality Office	e		
OC 10 INCRECTION						
JC 18 INSPECTION						
INSPECTED BY: 11			A	ENGINEER	RING SIGNOF	F (if required)

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

DATE:

MAR 0 7 2018

DATE:

1 2010 -11 - 30

REV. C SHEET 1 OF 1 10.11.25 09.07.15 05.06.10 DATE DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO.
M304B 304/316 BAR/PLATE
COPPRIGHT OF 2015 ST DATA ABROSPACE LTD
COPRIGHT OF 2015 ST DATA ABROSPACE LTD
COPPRIGHT OF 2015 ST DATA ABR G H MB ADDEO PLATE TO PURCHASE MATERIAL, ADDEO PLATE RELATEO SPECIFICATIONS, AND EG., CHANGED TITLE FROM "304/316 BAR" TO "304/316 BARUPLATE" REFORMAT DWG, ADD SPECS (ZN D6-1), REF PAR 08-020A, NEW ISSUE TITLE MFG. APPR.

APPROVED
DE APPR.

DATE 10 CHECKED DESIGN REV.

NTS

10.11.25

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE (NOTE: AISI 303 NOT ACCEPTABLE)

SPECIFICATION: ASTM A276 OR ASTM A240

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PART NUMBER:

M3048 T.TTT X WW.WWW THICK WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES AND "WW.WWW" = WIDTH IN INCHES

EG. 0.5" x 3.0" BAR = M304B0 500X03.000

EG. 0.5" X 12.0" PLATE = M304B0.500X12.000

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### MATERIAL RECEIPT INSPECTION FORM

MATERIAL: <u>M30</u> DATE:	048 (): MAR 0 7 1	<u> 1000</u>	PO / BATC	н NO.: <u>039</u>	126/5048	
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	Yes 6		_ TH _ SH	IICKNESS ORD ICKNESS RECE EET SIZE ORD EET SIZE RECE	EIVED: O.	700
DESCRIPTION	NCR (Check Y/N)		-	COMMEN	ITS	
SURFACE DAMAGE	YN					
CORRECT FINISH	(Y) N					
CORROSION	YN					
CORRECT GRAIN DIRECTION	YN					
CORRECT MATERIAL PER M-DRAWING		Ast	m A27	6		
CORRECT THICKNESS	(A) N					
PHOTO REQUIRED	YN					
CORRECT REF # TO LINK CERT	(Y) N	Heat	# 600	J		
CORRECT MATERIAL IDENTFICATION						
CORRECT M# ON THE MATERIAL	(Y) N					
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	YN					
DOES THIS REQUIRE AN	I IN	1				
EXTRUSION REPORT	YN					
CUT SAMPLE PIEC	E OF MA	TERIAL A	ND PREFOR	M A HARDNE	SS CHECK.	
		HRC	HRB	DUR A	DUDE	1 14/22
YPE OF MATERIAL			TIND	DUKA	DUR D	WEBSTER
IZE OF TEST SAMPLE	-					
ARDNESS / DUROMETER READI	NG -					
		1	the Quality Offi			

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY:	SIGNED OFF BY:
DATE: 9-MAR 0 7 2018	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

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10.11.25	09.07.15	05.06.10	DATE		_	REV. C	SHEET 1 OF 1	SCALE	STN	PATITION
MB 10	CP 09	PH 05.	BY D	ELTD	ANADA	-	SHEE			SPACE L'YD
ADDED PLATE TO PURCHASE MATERIAL, ADDED PLATE RELATED SPECIFICATIONS, AND EG. CHANGED TITLE FROM '304/316 BAR" TO "304/316 BARPLATE"		14.	DESCRIPTION	DART AEROSPACE LTD	HAWKESBURY, ONTARIO, CANADA	DRAWING NO.	M304B	TITLE	304/316 BAR/PLATE	COPYRIGHT © 2005 BY DART AEROSPACE LTD  PRE DOCUMENT OF WANTE AND COPPORTING AND IS SUPPLED ON THE ELPHESS CONCINCH THAT IS
DED PLATE TO PUR ATED SPECIFICATI DM "304/316 BAR" TI	REFORMAT DWG, ADD SPECS (ZN D8-1), REF PAR 08-020A	NEW ISSUE		Æ.	9	1189	. 6/2/	- 64		10 11 25
C A A A A A A A A A A A A A A A A A A A	8 REF	A NE	REV.	DESIGN	DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.	DATE 1

PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE (NOTE: AISI 303 NOT ACCEPTABLE)

PART NUMBER:

SPECIFICATION: ASTMA276 OR ASTM A240 M304B T.TTT X WW.WWW THICK WIDTH

EG. 0.5" x 3.0" BAR = M304B0.500X03.000 EG. 0.5" X 12.0" PLATE = M304B0.500X12.000 WHERE "T.TTT" = THICKNESS IN INCHES AND "WW.WWW" = WIDTH IN INCHES

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SPECIFICATION CONTROL DRAWING

### MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M416  DATE: M	AR 0 7		P	O / BATCH NO.: (	039126/50	4864
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:	10'		THICKNE SHEET S	ESS ORDERED: _ ESS RECEIVED: _ IZE ORDERED: _ IZE RECEIVED: _	1.000 1.000 N/A N/A	
DESCRIPTION	NCR (Check Y/N)		C	COMMENTS		
SURFACE DAMAGE	YIN	7				_
CORRECT FINISH	YN					_
CORROSION	YN					
CORRECT GRAIN DIRECTION	(Y) N		1			
ORRECT MATERIAL PER M-DRAWING	Y) N	Astun	A374			

CUT SAMPLE PIECE OF	MATERIAL A	ND PREFOR	M A HARDNE	SS CHECK.	
R	ECORD RES	SULTS BELOV	N		
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

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N)

(Y) N

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY:	SIGNED OFF BY:
DATE: 9-90 MAR 0 7 2018	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

**CORRECT THICKNESS** 

PHOTO REQUIRED

CORRECT REF # TO LINK CERT

CORRECT M# ON THE MATERIAL

DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF

DOES THIS REQUIRE AN EXTRUSION REPORT

CORRECT MATERIAL IDENTFICATION 💯



DESIGN	DRAWN BY	DART AEROSPACI HAWKESBURY, ONTARIO, CA	
CHECKE	APPROVED	DRAWING NO. M4140H-R	REV. A SHEET 1 OF 1
DATE	05.02.21	TITLE 4140 ROUND BAR	SCALE 1:1
Α	05.02.21	NEW ISSUE	

PURCHASE MATERIAL: AIST 4140 H ROUND BAR

PER AISI 4140 OR ASTM

A304)02/-A-434-80/

"A193-03-GRADE-B7 /-A29-03 /-A322-91 OR

UNS # - 641400

MINIMUM ULTIMATE TENSILE STRENGTH " 100 KSI MINIMUM YIELD TENSILE STRENGTH = 66 Ksi

WHERE D. DDD = DIAMETER IN INCHES M4140H-R D.DDD PART NUMBER : DIA

EG. 78" ROUND BAR = M4140 H-RO. 875



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49633	,
Po.12367	
1-41-0h1hd	
6	•

All bundles listed bel	the first framework (1997)										
All bundles listed be Chemistry		BOL	Ship Date	Customer PO	Item		Customer Item (L	item Description			
All bundles listed bel		222244	13-Dec-2017	B38384	11142 rev 005		506295	1 HR RD 4140/42MM 2KHBIN SBQ QTSF FG MST	SBQ QTSF FG MS	_	
Chemistry	All bundles listed below were produced using steel from Heat 177569 issued by ALTON STEEL and were completed from Eaton Steel Job 828517.	steel from He	at 177569 Issue	d by ALTON STEEL an	d were co	mpleted from Eaton	Steel Job 828517.				
cucinisu y	Description			Value	Units	Mechanical	Description		Value		Units
	Carbon			0.41000	PWGT	TENSILE PSI	Tensile Stre	Tensile Strength in PSI Units	148000	0	PSI
Ma	Мапоалеве			0.89000	PWGT	YIELD PEI	Yield Streng	Yield Strength in PSI Units	138000	0	PSI
D	Phosphorus			0.01300	PWGT	BLONGATION	Percent Elongation	ngation	17.00		PCT
. 00	Sulfur			0.02000	PWGT	REDUCTION	Percent Red	Percent Reduction in Area	52.0		PCF
200	Silicon			0.23000	PMGT	BRINELL SURF	Brinell Surface	face	271.0		BHIN
N.	Nickel			0.08900	PWGT	Heat Treating	Description		Value		Units
L	Chromium			0.84700	PWGT	TEMPER TEMP P	Temper Temp	Temper Temp in Fabranhait	500 - 2500		DEGE
C.W.	Molvbdenum			0.15900	PWGT	AUSTEN TEMP P	Austenitize	Austenitize Temp in Fahrenheit	1600 - 1700		DEGE
N.	Aluminum			0.00300	PWGT	SR TEMP F	Stress Relie	Stress Relief Temp in Fahrenhelt	200 - 2500		DEGE
100	Copper			0.25000	PWGT	MAGNETISM-HT	Magnetism in Gauss	n Gauss	0 - 20	0	GN
V	Vanadium			0.02800	PWGT	TIME AT TEMP	Time at Temperature	perature	Report	1	
Ð	Columbium			0.00300	PWGT	QUENCH MEDIA	Quench Medi	Quench Media Requirements	D&W/O		
N	Nitrogen			0.01100	PWGT	STRESS FREE	Cert stress free	free	CERTIFIED	Q.	
P+S	Element Sum Limit			0.03300	PWGT	HT4140-420T	Quench & Temper	mper	CONFORMS	MS	
Id	Ideal Diameter			4.94000	ä	Mill Processing	Description		Value		Units
Cleanliness	Description			Value	Units	MELT COUNTRY	Maired in Country	Ouncey	AST.		
MACRO ETCH	Report macro etch results.	esults.				ROLLED COUNTRY	Kolled in C	Suncry	A 94		· Mad
Geometry	Description			Value	Dritts	ACT'A Clandard	Description	arto	Vallage		Ilmits
DIAMETER	Diameter			Volume		A193/193M-01	Grade B7		CONFORMS	SW	·
Joininy	1/26 took from Oneschad Rod	ched Rnd		56	HRC	A304-05	Carbon & All	Carbon & Alloy Steel Bars End Quench Reg		WB	
73	2/16 inch from Ouenched End	ched End		56	HRC	A322-13	Steel Bare,	Steel Bars, Alloy, Standard Grades	CONPORMS	MS	•
.13	3/16 inch from Quenched End	ched End		56	HRC	A434-90a-BC	ASTMA BC TE	ASTWA BC Tensile and Yield properties	CONFORMS		
14	4/16 inch from Ouenched End	ched End		95	HRC	Structure	Description		Value		Units
T.E.	5/16 inch from Ouenched End	obed End		56	HRC	PERCENT IM	Percent Tem	Percent Tempered Martensite	80 - 100		PCT
35	6/16 inch from Quenched End	ched End		252	HRC	MICROSTRUCTURE	Reported Mid	Reported Microstructure	Æ		
77.	7/16 inch from Quenched End	ched End		54	HRC	Tag Number		Otty Units	Length		
78	8/16 inch from Quenched End	ched End		52	HRC	022-2158147		2925 LBS	24ft6in		
79	9/16 inch from Quenched End	ched End		5.1	HRC				•		
510	10/16 inch from Quenched End	nched End		50	HRC						
711	11/16 inch from Quenched End	nched End			HRC						
312	12/16 inch from Quenched End	inched End		47	HRC						
J14	14/16 inch from Quenched End	nched End		45	HRC						
316	16/16 inch from Quenched End	nched End		42	HRC						
318	18/16 inch from Quenched End	inched End		42	FRC						
J20	20/16 inch from Quenched End	nched End		41	HRC						
322	22/16 inch from Quenched End	niched End			BRC						
324	24/16 inch from Quenched End	nched End		39	HRC						
328	28/16 inch from Quenched End	nched End		36	HRC						
132	32/16 inch from Quenched End	enched End		SE	HRC						
const dim acce along	Stand Intentifiers reference the sta	nel orade, heat	perchase order nun	nber where applicable, part	number, proc	fuct description and quant	ity. Material produced	Durante sono with Eaven Steel Identifiers releasons the steel cardle, heat curchase order number where applicable, part number, product description and quantity. Malerial produced in accordance with Eaton Steel's Clusity Manual CIM-00002 Rev 0 dated 11/21/2013.	anual QM-00002 Rev 0	dated 11/21/	2013.
when him show out in	a has a manufactured of a work of white the standard of	if engander	of a train copy of	tata represented in com	Dany recon	ds. This steel was not	subject to weld repa	The conv of data recreasanted in company records. This sleet was not subject to weld repair or exposed to mercury while in the possession of Eaton Steet.	possession of Eato	n Steet.	
Created on 18-Dec-2017	2017	The die	the unreal wayme	ment was prepared by menas of electronic	nie	10221 Cap	ital Avenue, Oak P	10221 Capital Avenue, Oak Perk, MI 48237 USA	Tel	Tel: 248-398-3434	1434
Thomas Snabes, Co	Thomas Spabes, Corporate Metallurgist	Sorty while		essing and is salid without signature		http://www	http://www.eatonsteel.com		Fax	Fax: 248-398-1434	434

500 CK 1 CK 2 K



# CERTIFIED MILL TEST REPORT

Alton Stoel Test Lab #5 Cut Street Alton, IL. 62002-9011 (\$18) 463-4490 EXT 2466

2		Story Ste	Batton Steel Contouralition	POTE					SHIP TO		Exton Seet Conoration	Pomorali	8						
·		OZZICJE Sk Park	10221Capital Avenue Oak Park, NE 46237	97 6						j tr≍ đ	do Apollo Heak Treat 10400 Capital Street Oak Park, MG 48237	Dat Treat	š						
Date ASI Ord No. ASI Ord Line Item		87517	08/25/2017 Oustomer PO 87517 Qustomer PT.	8 5	_	10913	1633	163357-HS		\$ 25	Specifications Specifications Specifications (STM A 304-1), ASTM A 122-07	ASIA,	A 722.0						
See Bor. Hot Rolled. 1,0000, 27t 0	1,0000.2	72	1														Spand	Strand Cast, RR +62.39:1	62.39:1
Wet Number CHENTOLA MALVOSS TEST NUMBER						CHEM	CAL AND	T SDSA1	EST MET	Yield PET		Ten 615 & 6-101	1.2	:	% Elongadon		401 %	Band Test	ğ.
HORT NUMBER	U	Min	۵	-	S	55	5	×	ò	$\vdash$	Mo Sr	-	7	NB/CD	>		Æ.	z	8
177569	0.41	0.89	0.013		0.020	0.23	0.25	0.069	0,847	0.159	0.011	1000		0.003	0.028	0.0003	0.0001	0.010	0.0019
1				ğ	HZW.	MRDE	TITEST	USTRE	ASTM A	255 CAL	DONINY HARDENASILITY USING ASTN A-25S CALCULATED FROM CHEMICAL DI	FROM	HENCE	AL DI					
feat Number 17599	8 ~	19.4	*	*		11 18	25. 22	31 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15		35 35 56 35	15 16 17 18 19 110 112 114 116 118 120 124 56 15 54 52 51 50 47 45 42 41 39	35 55	39 310 51 50	312	114	316 31	18 . 120		28 332 36 35
								SPEC	ALTES	SPECIAL TEST RESULTS	(0								
			AFR.	ASTH E-45 Hethod A:	3			NE V	ATTN E-45 Muthod C.	UB	SVENEZ	-	ASTACHE	ii	Charpy	AGE	1	Hardness	
Heat Number	*	E	12	2	HA HB	3	운	u,		٥	S	0	ec es	U			9	15 EP.01	
177569								ADDIT	TOWAL C	ADDITIONAL CONNEHTS	100	-	~1	6					

No mencury, issud, motum, or stome combining mammels or equipment is used or deliberately added in the production of this steal, No weld or wall motals were performed on this mitiental.	American compositions of the report, america in Mai, is not all allowers without written approval by a representatible of Albon Statel Incorporated.
This Shall is 100% Discoic Art Turning Metod and Rolaid in the U.S.A. Huseriol qualifies as NATA origination.	I herby ontaly that the slove least are corner as contained in the reports of Author STEE, IncodeCountED
Subscribud and envern to before me, a hobery Publis, in and for the county of Healton, Stens of Ulmois.	Quality Leader: Scott Hall
Utts Day of	
Ny constitution crysina.	South thal
(Hotary Pubitz)	

GB	GD GERDAU	Huntington Facility - Test Report 25 Commercial Road, Huntington, IN 46750 (260) 356-9520 Fax (260) 356-9522	Printed: 1024/2017 11:10 AM 7750
Sales Order Heat Number Siza Turned OD	41745 177568 1.0000 1.0000	Customer Name Location	EATON STEEL CORPORATION 10221 CAPITAL AVE. OAK PARK, MI 49237
Grade	4140		
Test Remarks:	Test Remarka: 1 HR RD 4140/42NM 26FT FQ FG MST	3MST 1/20 82.8517	7 49 11142
Approved 🔽	By Metallungist		Apprehend Date 10024177
hemistry Date			CI LADO DING PAGE

Other Heat Mumber C Mn P S Si Ni Cr Mo Cu Ai V B 177669 0.410 0.690 0.013 0.020 0.230 0.089 0.847 0.159 0.200 0.003 0.020 0.0000 Mick | Location Min O&T Herdness Test Data
HerdnessType

			E	PARIL INDEX	MINK   LOCATION		Sample Locetton	contion	
	2			27.9			Surface		
	2			408			Consider		
							Mid Radius	#	
	Re			33.7			Com		
Q&T Temelo	Q&T Tension Test Data								
	,	Sample Gage: .500" Die.	G Da.						
		Balo Number:							
Tensile	Yield 1	Method 1	Yield 2	Method 2	Elong %	R/A %	Gege Length	Tensile Location	PC#
148 Ksl	138 KsJ	.2% Offset			17.0	\$2.0	2 000" C 1	Canalar	
						2	100000	Tan land	

Austentized at 1,830°F for 0.7 minutes Temperad at 1,400°F for 0.7 minutes Heat Treat Date

Induction Heating Water Quenched

Microstructure As Quenched (Ro) Megnetiam (gauss) +/- 5 Straightmass 0.125"/5 Ft Other Teet Deta Decarb (Inches)

Description of Other Tests

Produced Stress Free

We hareby cartify that the reported data are correct eccording to Gerdau tests and those of its suppliers.

H22637

F037A

North American Stainless Canada Inc. 740 Imperial Road North 49086

10, 75987 DART

METALLURGICAL TEST REPORT (502) 347-6000

ω Certificate: 355925

Canada

Guelph, ON N1K1Z3

007185 001 Customer:

Date: 11/20/2017 Steel: 304/304L

Page:

Finish: 1

Corrosion: ASTM A262/15 A 180Bend-O

NAS Order: IN 0255577 13

PRODUCT DESCRIPTION

Your Order: 15496

STAINLESS STEEL PLATE, HRAP; UNS 30400/30403
ASTM A240/16a,A480/16b,A666/15;ESME SA240/15,SA480/15,SA666/15
CHEM ONLY ON FOLLOWING RSIM: A276/A7,A479/17,A484/16,A312/16
CHEM ONLY ON FOLLOWING ASME: SA312/13,SA479/13

AMS 5511H/5513J XMRK; MIL-S-5059D AMD3(X CRN MEAS); MIL-S-4043B NACE MR0175/ISO 15156-3:2009 A, MR0103/07;QQS766D-A X MAG PERM MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

No weld repairs Product Mfg.by a Quality Mgt.Sys. in Conf. w/ISO 9001 Steel Making Process: EAF, AOD, & Cont. Casting Material is Free of Radioactive Contamination Mat'l is Free of Mercury Contamination. EN 10204:2004 3.1; RoHS 1 & 2 Compliant REMARKS

\*Melted & Manufactured in the USA; Mat'l is DFARs Compliant

Product Id	Plate#	Skid #	Skid # Thickness	Width	Weight	Length Mark Pieces Commodity Code		Mark	Dieces C	ommodity Code	
02600J HB	02600J HB	PK5213	.5000	60.0000	2,100	PLATE	240.00	57	1		
			_								

Chemical Analysis per ASTM A751/14a CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) ANALYSIS HEMICAL U

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

										-	
HEAR	CFK CC %	ر مه	CR %	CU %	WN &	MO %	* Z	% IN	용	se se	
eods ) prof	US	.0158	18.0605	.3750	.3750 1.7165	.2690	.0763 8.0920	8.0920	.0305	.0013	
		SI &									
-		.1505									

### Ø 国 Н H α, 0 P E ĸ ρı Н Ø U MECHANI

Product Id# Plate# 02600J HB 02600J	Plate#	70 H	1 d UTS 2 C F KSI	20C .2% YS SI KSI 39 38.36	20C ELONG % Hard %-2" RB 65.40 80.5	Rard RB 80.50	R of A % 67.81	

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items ested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Dept. Mgr. Technical

KRIS LARK

11/20/2017

mejade tobsigj

2816

a) Froe from mercury contamination.

Surface quality / dimensions:

Kemarks:

(spiepueis

ISHIEM

Dimensions:

Steel grade: PO# 15321

40551 NM NIC 0

ASTM A240/A240M 16A

DIN BN 10088-5 14

DIN EN 10504-3-1 05

891 M084A/084A MTZA

AD 2000 W 2 08

Reat treatment: Mirrimus Solution anneat teat

A.2 lu2 ob soirémA xonI mereqA

Esail G. 2010 C. 244. Self C. 245. 254. And no clother Gentle. 2010 Centrally Left Control of Contr

acc; to EN 10201-3.1. QUALITY CERTIFICATE

UAO|CE: Date: APPERAM Orden

STAJ9

Process:

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1191611

17/08/2017

10114964

TBEORET

Product:

NR1- HOT ROLLED

b) Material tree of contamination from radioactivity. (Guarantee while stored under responsibility of Aperior and mentantical despite and the material are in contamination and the material and a stored to such that the material are in a stored to such that are the material and the material and the material are the contamination and the material are the material and the material and the material are the material and the material are the contamination and the material are the material and the material are the material are the material and the material are the mat

S IS UN 0 10+5 x ni 00,00 x 1/1 820,0 - 1/m 8600 x mm hSet x mm 88,95 Ejulsh:

Results 8181,0 881,0 7500,0 614 111,0 00,8 0,0395 0,0020 18,05 094'0 95'L 0,1228 0,020 E066097 0,0033 0,170 010 9/0'0 10,8 18,05 6000'0 8980'0 0970 1,28 810,0 702625E % % % Mdd 8/0 % % % % ກວ 00 IA N OW IN 10 Heat nr. Chemical composition

04.	78.S	08	2,88	08	2.88	0.5	2.88	24	1015			-	No transfer to the second state of the second
099	2.65	04	2.66		2.60		99.Z		78,2	02.	78.5	LB L	ingisVI econ-
0	JAUG	0	DOVE	0	DON			09	2,65	09.	2.65	TB	MgisV7 197
94'48	92'78	78,33	78,33	78,33		0	DUAL	0	DUAL	0	DUAL		Self DileaC
90/90		90/90	20.02	90/90	55,87	78,33	78,33	94,76	97,48	94,76	91'28	ВЯН	Asidness RB
00'55		00.52		00'55		90/90		90/90		90/90			Auston, Grain Size
18,84		81,02		81,02		00'\$\$		00,52		00'88		%	S notingable
150		66'9t		66'95		81'05		78,22		P8,22		KZI	%0.1 Argnera Elein
2,00		68'96		68'96		66'9b		50,12		50'15		KZI	rield Strength 0.2%
1	Н	Τ	н	1	Н	08 90		12,66		17'66		KSI	Tensile Strength
52E03	1056	20802	809/	70000			Н	7	H	1	Н		10 1700
SE035		08054		0B055		90805		S2E03	1026	22E03		Source:	aldaiseV\\tegT
				23000	2000	08023	16097	2E032	29207	2E038	70207	1141.0	

DIN EN 10088-3 14

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NACE MR0 150, 15156 09

Y2ME 2V480/2V480M 12

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DIN EN 10058-1 19E VD 5000 M 10 01 YZWE ZYZ40/ZYZ40M 12

DIN EN 10088→ 10

DUAL CERTIFIED AIST- 304/304L NO WELD REPAIR PERFORMED Stell grade also acc. t

Paulo Sérgio Ribeiro Qualified Inspector

Aperen Inox América do Sul S.A.

0045-CPR-1156 Optivities the of contamination from redioactivity. (Guarantee while stored under responsibility of Aperem Inox América do Sul S.A.).

(c) The products supplied are in compliance with the requirements of the product specification.

(d) Quality management system certified acc to standard ISO/TS 16949 - Certificate ABS QE vs 30071.

(e) Quality management system certified acc to standard ISO/TS 16949 - Certificate ABS QE vs 30071.

(f) Environmental management system certified acc to standard ISO/TS 16949 - Certificate ABS QE vs 65989.

(g) Product and system certified acc to standard ISO/TS 16949 - Certificate ABS QE vs 65989.

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(g) Product and system certified acc to standard ISO/TS 16949 - Certificate ABS QE Vs 70074 - Certificate A

7015ER

North American Stainless Canada Inc. 740 Imperial Road North Guelph, ON NIKIZ3 Canada NAS

METALLURGICAL TEST REPORT

6870 Highway 42 East Ghent, KY 41045-9615 (502) 347-6000

Certificate: 323707

007025 001 Customer: MAS Order: DS 0012604 01

8/16/2017 Steel: 304/304L Date:

Page:

Finish: 2B

Corrosion: ASTM A262/15 A;180Bend-O

DESCRIPTION: PRODUCT

C17720

Your Order:

STAINLESS STEEL SHEET, C.R. ANNEALED & PICKLED; UNG 30400/30403
ASTM A240/d 6a, A480/16b, A666/15; ASMG SA240/15, SA480/15, SA666/15
CHEM ONLY ON FOLLOWING ASTM: A276/17, A479/17, A484/16, A312/16
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13 AMS 5511H/5513J KORK; MIL-5059D AND3(X CRN MEAS); MIL-4043B NACE MR0175/180 15156-3:2009 A, MR0103/07;QQS766D-A X MAG PERM MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

Mat'l is Free of Marcury Contamination. No weld repairs. EN 10204:2004 3.1, ROHS 1 & 2 Compliant

Product Mfg.by a Quality Mgt.Sys. in Conf. w/ISO 9001 Steel Making Process: EAF, AOD, & Cont. Casting Material is Free of Radioactive Contamination

\*Melted & Manufactured in the USA; Mat'l is DFARs Compliant

P47381

Mark Pieces Commodity Code 27 NA 00.960 ------Length-----SHEETS 4,175 Weight 48.0000 Width 1200 Skid # Thickness 01459P F Coil PI Product E26433

CHEMICAL ANALYSIS

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323 Chemical Analysis per ASTM A751/14s ES(Spain) US(United States) ZA(South Africa) JP(Japan)

CHEMICAL	ANALYSIS		CM(Country of Melt)	ES(Spain)	of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)	ites) ZA(Soi	uth Africa)	IP(Japan)	Chemical	en) Chemical Analysis per ASTM A751/14a	148
HEAT	CM	ye U	CR %	* B	NOV %	MO %	×	MAN & MON W NI S. NI S. D. S.	al d	34	1
459P	20	.0162	18.2830	.4160 1.7765	1.7765	.3080	.0631	.0631 8.0820	.0310	.0010	
		9 10									
		2100									
		0075									

### OPERTIES 四日 MECHANICAL

Product Id# Coil #	Coil #	- 0 U	UTS	20C	K YS 3	.2% YS 20C ELONG % Hard KSI %-2" RB	k Hard	Tail Hard
E26433	01459F	E4 Du	FT 93.97		7.25	48.77	85.00	85.50

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the Items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Dept. Mgr.

Technical

KRIS LARK

8/16/2017

くこし

1944

52 h S #

# INSPECTION CERTIFICATE

国人母戏智樂版份有限公司 MAYEH MAU CORP.

91	im at									
工學是政府條件指數位於以外	345, BHEM AN FO. LU CYU HSWAG KACHESUNG HEIEN TAWAN R.O.C. TELLOY 38972465 PAKINY 38073005 CERTIFICATE MOLFTY M816-1 DATE OF INSUENDANATONT				z §	52	6.3	3 7	24	
<b>计距离</b>	345, BHUM AN FO. LU CAU HSWA KACHESUNG HERM TAWAN R.O. TELLICY SWIZERS FAX:ROYBRY 3008 CERTIFICATE NO.FT 71881-6. TAYTE CIF INSUE SARAZANIT	200			5	1819	1622	1812	1810	
拉布路	A AN PANTA CANA CANA CANA CANA CANA CANA CANA	No.	200		Z 5	010	98	38	90	
神楽	24. 94. 94. 94. 94. 94. 94. 94. 94. 94. 9		(%)	Ī	en 6	2	6	8 -	•	
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		9	ST C	9	17.00	678	970	070	196	02770
	STATE				7.5	g	318	2 2	32	37727
	F17M810 PRDIARY COLD ROLLED STAINLESS STEEL SHEETS ALS, 104-30 FINISH WITH PAPER INTERLEAVED ALSE THE PAPER INTERLEAVED			5 H		05S10127A-212	00579409B-211	658791928-ZZ	86579416A-21	86460
	ROLLED ST H WITH PA.	TOTAL CENT		Heat No.		YUIBSBAZ		VI 127 KORK	2513003	22/12
T d	L'30 PINES	PALLES INC. LANGE CO. INC.	Weight	ol ol	KG	187	1814	1863	1013	again w
736161	PRIMARY AISI JOA AISI JOA	TO LE	NO.05		Product	-	-		• •	N. K. A. A.
THE VIEW MAN CORP.	INVLICE NO. : COMMODITY : 3-BCRICATION .			3715		120"(3.0MM) X 48" X 96"	.105"(2 PMM) X 48" X 90"	075*(1.9MA) X 46" X 96" 090*(1.6MA) X 48" X 00"	048"(1.2MM) X 48" X 00"	

HATTER CONTRACTOR THAT THE MATERIAL DEBOTTAMENTION WE HELDERY SENTENT THAT THE MATERIAL DEBOTTAGED NEARLY HAS THE HALL CERTIFICATE.

ASME EAZAG-16 SAVAG-16 ASTIN MAZIONED 18 TYPE 304
1 ASME EAZAG-16 ASTIN ASIG-18 MAIO 18 TYPE 304
2 JYTEREGRAVILLA AT CORROSION IN ACCORDANCE WITH ASTIN A38-E
4. Endersex, 1- James 1980-1981 E18, 1983, COMPT ASSIN EST, 17)
4. Tando 1991 - ASTIN EBM-04 6.Test Method,C.S.N.A.S.TM 61016, 93 6.Obur Eloment; ASTM 61006, 103 7.MERCURY FREE

YIEH MAUCORP

ASTM NGG - ISASME SAGG-15 ANNEALED COUNTRY OF MELT AND MANUFACTURE : TANMAN

51h 5 井

LOL866d he immoran additions of Metcury compounds were made or used No welding or weld repairs were performed on this well-THE MEAN BURDLESO Hest Treatment: Solution annealed 1920 "F Hin, Air or weter cooked 9 econocc romation: ASTM A 262 PRACTICE E - Sample Acceptable 1.88 699 / 920'46 45'1841582 1000481415 18 L'LS 149/912'46 1000461411 Patt / ISA PSI / HPB SMH E AZ %2'08A **JEVY/SAEBSE** 0.27 190'0 0.21 18.05 010000 0.025 156 750.0 VSPT ZIZETS 40 % 8 % um % 18 % 2 % 2,601 to 1,160 to 1 24 214515 | 1000421411 096067 5'091'1/91109'E 5881807 Company of the Personal Person 0.0000.28 x fool 0000.64 x fort 0030.0 mm 03.826,5 x mm 05.815,1 x mm 53,4 Magnal Carrel separation and an included to the Carrel Separation of th AGTH A460/A480H-16b, ASME SA-460 Sec. II part & Ed.2016 TYPE SOULSOA ASTH A240M240H-168, ASHE SA-240 Sec. II part A Ed.2015 requipmed vibil ( spring to reschool) ( ( inches is asset) CHEET/HOLAS/BLECH 854645201010 Definiting recise as a PP die Erdrega 7 Einfersammigt No. 8013124SD1005 Later of the winds with the first object of the state of rben \ noo obrause ab \ or grabusse 1 / L SINDUBSTURPROFESSUGNIS ontokumbu CERTIFICADO DE INSPECCION 00002238041 INSPECTION CERTIFICATE FICTITIES I WARREN PROFESSOR grayment critical transmission of the mention in right

and the second of the second second

Law - 1221629 5493

Outokumpu Stainless USA, Lt. 2008 certified company an PEO 97122/EC, Anex I, 4.3 certified Lt.

County of Heat as per ISO 3166-1 AZU arti ni banutashinsin bubon9 EU ROHS Directive 201 IJESTEU Com

11984

1000481415

JIE408 84901-552+

## Flat Rolled Products

CERTIFICATE OF TEST

CUST ORDER NO. & DATE C18138

SEPERT BOYE ONLY PRIME 11/22/17/4788659 CUST. CODE L.82405

7219,33,0000 VANDERGRIFT, PA | 550144 GOV'T. CONTRACT FINISHING LOCATION

080

080

90

11/27/17 FA 668536 13020102060000 30-117-426 SHIFFING LOCATION 1121 VANDERGRIFT

GRADE AND SPECIFICATIONS

CARRIER - LUKEMART TRUCKING, LLC C R COILS ANNEALED 2B FIM 3 EDGE (ASME-SA-240)ED 2015) (ASTM-A-240-16A) THE SHAT STAINLESS STEEL SHEET (ASTW-A-262-15 PRACTICE E)

ITEM FCS DIMENSIONS W/G/L

AAC07322-A 855274 HEAT #

TEST # COIL #

THEO GROSS TARE NET

534875

50 15915

15965

8852660

TAG #/ CD SKID

C CUST IDENTITY 3042B,0351X48-RC

1 48.7.0351/2742.

COLL

20 15965

15915

EXW - EXCEPT VAT AND OTHER APPLICABLE LOCAL TAXES WHICH ARE THE RESPONSIBILITY OF THE BUYEF EMAIL INVOICE TO APESAMUEL COM VMI ITEM - DO NOT SEND ACK TO SOLD-TO, SEND TO SAMUEL SON & CO LTD, 2360 DIXIE ROAD, MISSISSAUGA, ON, CANADA L4Y 127 ORDER REMARKS:

7820069,

TYPE HEAT/TEST (WT %) 853274

Warm 0,11 N N \_\_\_CR\_\_\_ 18.21 .37 Z Z .. 00003 The second section of the second seco .833 1.63 . 02

**69** 三百百百

% RZA HARDNESS ( MEASURED ) BEND 82.HRBW SI.HKEW iY Z 54. # TENSILE X ELONG 54. # IN NI 95580. 94988.

ES.

YIELD

Z S

TELECON LISEL

T 46800. T 46608.

TEST LOCATION

001E 8852660 TTEM TEST NO

\* Y.S. BY 0.2% OFFSET METHOD

CORROSION ASTM GRAIN

A 262 PR ESIZE

PASS

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(67.HR30TW (68\_HR30TW

# ELONG AT FRACTURE

GEADE VERIFICATION WAS CARRIED OUT SPECTROSCOPICALLY NR = DATA NOT REQUIRED

PAGE 01 - CONTINUED ON PAGE 02

CONSIGNEE—Please Note—This consignment was turned over to

product and all safety &

The above is a true copy of data on file. The malerial and test results conform to the sales contract and apecification(s) as set forth in ATI Fast Rolled Products' Order Acknowledgement. W. S. Leterson Noreen DeFerrari Sr. Maneger Quality, Corporate Quality Assurance

11/27/17 15:01:12

### NOTICE OF SHIPMENT/ PACKING LIST



# CERTIFICATE OF TEST

CUST. ORDER NO. & DATE

7219.33.0000 5501.44 VANDERGRIFT, PA FINISHING LOCATION 11/22/17/4788658 L82405

080

080

PA 668536 13828182868888 38-117-426 1121 VANDERGRIFT SHIPPER NO.

"ATI 304" STAINLESS STEEL SHEET C R COILS ANNEALED 28 FIN 3 EDGE

ATI FLAT ROLLED FRODUCTS DOES NOT USE MERCURY IN THE TESTING OR PRODUCTION OF ITS PRODUCTS.

- LUKEHART TRUCKING, LLC

CARRIER

EN 10204:2005 - 3.1 CERTIFICATE DOES NOT INDICATE PED APPROVAL FOR THIS MATERIAL

DISPOSITION OF THESE COMMODITIES/TECHNICAL DATA TO ANY END-USER OR FOR ANY END-USE RELATED TO THE DESIGN, THESE COMMODITIES OR TECHNOLOGY, WHEN EXFORTED FROM THE UNITED STATES, ARE IN ACCORDANCE WITH THE USA EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW IS PROHIBITED. U.S. LAW ALSO PROHIBITS DEVELOPMENT, PRODUCTION, STOCKFILING, OR USE OF CHEMICAL, BIOLOGICAL, OR NUCLEAR WEAFONS, OR MISSILES, WITHOUT THE PROPER APPROVAL OF THE UNITED STATES GOVERNMENT.

MATERIAL IS OF USA MELT AND MANUFACTURE.

THE HÁRDNESS CONVERSION WAS PERFORMED USING EQUATIONS GIVEN IN ASTM E140 DEVELOPED FROM DATA IN TABLES 1, 2, 3, 5, AND 6. THE PARTICULAR EQUATION USED WAS BASED ON MATERIAL TYPE AND MEASURED HARDNESS SCALE. PER ASTM E140; THE CONVERSION VALUES ARE ONLY APPROXIMATE AND MAY BE INACCURATE FOR SPECIFIC APPLICATION.

THIS CERTIFIED MATERIAL TEST REFORT SHALL NOT BE REPRODUCED EXCEPT IN FULL. FEDERAL LAW PROHIBITS THE ISO-9001, AS9100, NADCAF, AND ISO/IEC 17025. MATERIAL WAS MANUFACTURED IN ACCORDANCE WITH THE ATI FRE QUALITY MANUAL REVISION 26 DATED 06/14/2017. PUNISHABLE AS A FELONY UNDER FEDERAL LAW. ATI FRF HOLDS SEVERAL QUALITY CERTIFICATIONS THAT INCLUDE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE AND MAY BE

- CONTINUED ON PAGE 63 PAGE 02

111/27/17 15::01::12.
The above is a true copy of defa on file. The material and test results conform to the sales contract and specification(s) as set forth in ATI fiel Rolled Products' Order Actunoviologement.

Norean DeFerrari Sr. Manager Quality. Corporate Ouelity Asse

CERTIFICATE OF TEST

## NOTICE OF SHIPMENT/ PACKING LIST

CUST ORDER NO & DATE

C18138

Fat Rolled Products

7219.33.0000 SHIPPER NO. 5501.44 GOV'T. CONTRACT VANDERGRIFT, FA OFOGRA NATE ORITY 11/22/174788658 MG BILL

1.82405

080 ę,

DSG PRIME

80

11/27/17 PA 668536 MILL ORDER NUMBER 13020102060000|30-117-426 SMIPPING LOCATION 1121 VANDERGRIFT PRODUCT CODE

GRADE

CARRIER - LUKEHART TRUCKING, LLC "ATI 304" STAINLESS STEEL SHEET C R COILS ANNEALED 28 FIN 3 EDGE

ATI FLAT ROLLED FRODUCTS PERFORMS CHEMICAL ANALYSIS BY THE FOLLOWING TECHNIQUES FOR TESTING LOCATIONS TC, BN, & LO:

C, S BY COMBUSTIONZINFRARED

MM, P, SI, CR, MI, MO, CU, CB, CO, V BY WDXRF N, O, H BY INERT FUSION/THERMAL CONDUCTIVITY

B BY OES

AL AND TI (>=0.10%) BY WDXRF; OTHERWISE BY DES

PE, EI, AG BY OFAA

ATI FLAT KOLLED FRODUCTS HAS NO CONTROL OVER CUSTOMER FROCESSING OF MATERIAL; INCLUDING, BUT NOT LIMITED TO, BUFFING OR ELECTROPOLISHING MATERIAL WITH A 2B OR OTHER FINISH, AND DOES NOT REPRESENT OR GUARANTY THAT THE MATERIAL IS SUITABLE FOR ANY PARTICULAR PROCESS OR USE OF CUSTOMER.

EN 10204:2005 3.1 CERTIFICATE.

TESTING WAS PERFORMED AT THE FOLLOWING LOCATIONS:

BN = ATI-FLAT ROLLED PRODUCTS; 100 RIVER ROAD; BRACKENRIDGE, PA 15014

TC = ATI-FLAT KOLLED PRODUCTS; 1300 PACIFIC AVENUE; NATRONA HEIGHTS, PA 15065

AAAAAAAA AAAAAAA FOR ACCESS TO ONLINE CERTIFICATES OF TEST REGISTER AT MYATI, ATIMETALS, COM \*\*\*\*\*\*

- FINAL PAGE, **S** PAGE

The shows is a true capy of data on file. The material and test results conform to the sales combact and specification(s) as set forth in ATI Flat Relied Products' Order Acknowledgement.

Noreen DeFerrari Sr. Manager Quality, Corborate Quality Assurar

W. S. Leterain

15:81:12

11/22/11



### VIRAJ PROFILES LIMITED

21 VINTE22 21 EET BINCH I BYB? DE2CKILLION

HOOZOBSZEE NO:

Worker SURVEY NO. 25/1, 25/2, 26 & 34, Villege-MAAN, Taluke-PALCHAR, Dist.- THANE, MAHARASHTRA-401 506, INDIA,

	The same of the sa				
41257	304/304T	)			
HEVL Nº	CHADE				
23.05.2016	100006688822	\$1/6665001/19			2081-00
TIVO	INSPECTION NO	VCKING FIST NO	Į.	ON	RDER

CONTAMINATION, COUNTRY OF ORIGIN: INDIA. MELT SOURCE: ADD. WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND POUND TO BE PREE FROM RADIOACTIVE ON GRAIN BOUNDARIES, MACRO: GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1650C, SOAKING TIME OR HRS, WATER QUENCHED. MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MICRO-FREE FROM CONTRIOUS CARBIDE NETWORK REMARKS NACE MR0103-2012, NACE-MR0173-7013, SAE-AMS-S-7720A, MIL-S-862-8, AISI 304/304L & UNS/S30400/S30403, CERTIFICATION AS PER EN SA320-11 88 CL-1 ASTM A314-2008, IGC SATTSFACTORY AS PER ASTM A 262-10 PRACTICE E. AMS 3639H /AMS3647J (EXCEPT MARKING), QQ-6-763F, COND A ANTONATON IS COND A, A 1937A 193M-126 BS CL.1, A320V-320M-116 BS CL.1, A484 11, A388/A388M-05.ASME SA182-14, SA479-11; SA 193-11 BS CL.1, MATERIAL CONFIRMS TO DIN EN 10088-3:2005:WWR I A301/1 A307,EN 10222-5 AND EN 10272 COND-A & ASTM A182/A-182M-15, (ASTM A276/A-16 SPECIFICATION: 0.2 0.071 0.17 0.48 0.01 ini NOS Crain Sinc NHE **GSTA** Strength Hongaguery. Hardae Reduction Of 0.2% yield Tenaile TEST RESULTS 0.08200 0.150 0340 055.0 8.070 071.81 0.0350 0.0250 0980 070.1 0710.0 ZN% **90% #0%** oM4 IN% 40% 4% 15% EM% **3%** CHEMICYT YNYTKEIS 1,111,000 LB 15. - 14. **DIN 1013** ROUND 2115 WEIGHT PIECES TENCLH SHAPE ROUGH & PERLED

We hereby certify that the meterial described above has been tested and complies with the terms of order/contract.

ACEROS INOXIDABLES 4101817

Contilled by

Hax 34-(4) 4 53 16 36 PO. Box 1.322/45080 Bilbase Tel. 34-(4) 4 71 13 09 Limondo LOIU (VINCAYA) España

120 14091 \ 201 1810050 120 2001 \ 201 000206 FIRÓV

Scilo del Inspector Trada Mark - Reichen des Lieferwerkes Anegenns del suministrador

LAVAL, QUEBEC, HTL 5R2 - CANADA 4054, BOULEVARD CORBUSIER, BUREAU 201 LES ACIERS TRANSBEC (1997) L'TEE

P1-25-557

7.8TN A 84 A MTSA ROUND 5/8" 1653 Lbs odeis epung noiznem:3 y imeq Tolemorda Meight Bars se pung Shape and Size - Gogenstad Tolerance - Toleranz Conceponde . 31-M674 A \ 674 A MTSA Enteprochend KISI-304 T WECAMAX According to Steel Grada Pedido Nº Colada Node Ro'erencie A7725-VAR N- IlalcoB 439067 240247 Werks - Mr Your order Nº OLF Order Nº 19-07-2017 Cedificado nº 351584 Certificate type-AP2 Nach EN 10204/3.1 Dale - Datum - Fecha Certificate nº - Prul-Nr

Chemical composition according to ASTM F 899-12b. Requirements - Anforderungen - Extgencias 0594 sened sollug

Chemical composition according to DOD-F-24669/6.

Heat treatment / Warmebehandlung / Tratamiento térmico

Type 304-F.304-F.304L.

ASTM A 320 / A 320M-14. ASME SA 193/SA 193M-15 B8 CLASS.1, ASTM A 193/A 193M-16.B8 CLASS.1. ASME SA 182 / SA 182M-15 . 81-MSB1 A\S81 A MT&A BST-MSTS ANTEA 21-M874 AS 1 874 AS 3M2A

Melting process / Erschmelzungsart / Process de Fusión AMS QQS 763D-15 COND.A.

Solution annesical/Abgoschrockt/Hipertemple-Cold drawn/Gezogen/Esttrado-Polished/Pollort/Pulido-E.A.F. / A.O.D. 1050C 4H/Std WATER/WASSER/AGUA

	€	Size nieso Size Korngrösse Korngrösse Konngrösse	Bebt O.K.	si wochslun	mbdng to ktrosk Vor metcla	K'   200	() ello	vity inspect vitalskontri Radioacivic	KBGKGKI	L'H'	) Guns	qaril tencian semauA bri grotanemib	า ซินกษินก	UDISBR
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sipualise y Salt ol 1;	1 tost / Kersbac	oeduuj	acentrich chall wall	% Z	a⊧ 7% ∨	%F 2D	IS)			Rpo.	534	namicaç es Procesab astadorq	eanuBeu q	emdA.
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Works Inspector Quality Ming. Marian Tejedo Acc. EN 10.204 EDA \ EDb

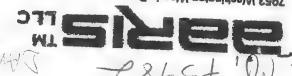
Remarks - Bemerkungen - Observadones

IC test acc./IK prüfung nach ASTM A 262 E.15. OK No weld repair. Free From Mercury contamination/Quecksilberfreiheit.

Inspector de lábilez Der Werksaachvorarhaulige

# JUM SROYS

### Material Test Report



Ref No: 104702 9279300000 9102/20/9 ON ATM Date

00.68

00'94

HRB

HARDNESS

7953 Washington Woods Dr.,

Dayton, OH 45459

Fac (702)926-4126 Phone: (937)573-4675

Heat No: 15D2317

Product: TUBE

TEST CERTIFICATE ACC TO DIN 50049 53.1 B/EN: 10204: 3.1

PO Number:87-15955 Or-33621-78nedmuN haq

"385 ot "045=ritgned; Lenutad; ("750.0=TW); "356.0=Gi Description: A513T5-14; SRA; DOM; Grade=1020; Category=CARBON WELDED; Round; OD=0.625";

Steel Grade: 1020

71,480

000'99

l<sub>8</sub>q

S.Y

MECHANICAL PROPERTIES 6,096,000 - 7,315,200 MM 240,000 - 268,000 IN 009.3 20,838.000 8,351,422 **WEIGHT TON** TH / RETEM YTITNAUD

009,18

000'99

184

SIL

Ends: Debured

00.0S

10.00

3 % E

CHEMICAL ANALYSIS NI 00000 000000 960'0 2.413 TW 00000 NI 0.0050 354.0 11,049 OI NI 0.0050 000000 628.0 278.2F GO MON +VE -VE TOLEZANCE DIMENSIONS

% % Cobbea (Cn) (V) mulbensV % Mohbdenum (Mo) % Nickel (Ni) % Chromium (Cr) 09000 0980.0 % Sulfur (S) 06000 0360.0 (9) smongaons 0367.0 (JA) munimulA 0117.0 (is) nooilis 0,2040 0.6000 Manganese (Mn) 0.3000 0081.0 0.2300 Carbon (C) THW XAM NIM MOI ELEMENTS

Gauge Width (MM): Tensile Spec Type: Sample Orientation:

: PASSED

: \$\3\% OE OD 1\2\% OE OD 6\V2ZED

PROD

WILL

XAM

NIM

: PASSED (1/1000 MM) CENTRE : 15% OF 1D PASSED

> FLATTENING TEST 100% EDDY CURRENT TESTING- E309

> > % %

%

95 %

%

FLARING TEST

STRAIGHTNESS

Remarks:

(ng) uiT (d2) ynamitnA

(15) muinoonis (B) nonoB

(M) negoniN

(IT) muinetiT Calcium (Ca)

Columbium (CB)

Product is free of weld repair and has not come in contact with Mercury or any of its components. Produced in: INDIA AlGM: nl betteM

We hereby Certify that the material described above conforms to Specification and Purchase Order.

notannot liig

Quality Co-ordinator

Any questions, Please email: TestReports@ varis-lic.com

Specification

### TPI Work Test Certificate

wnundappa

LOST BOX NO.4 & 18, M T H ROAD, AVDI, CHRUNAI. LUBE PRODUCTS OF INDIA. MODULE - 1 LIBE INVESTMENTS OF INDIA

: BC2583 \00-1\VI-16

: LIFECTZION STEEL TURES - CDW /:

ASS: : ASTM ASI3 / ASI3M-15 TS 1020

£64000910'+64000910: Bandle No's Condition

CHADE DESTINATION / BUNDLE NO /COUNTRY OF ORIGIN. CUSTOMER SIZE ACONDITION AQUANTITY ACROSS WEIGHT /TAG MARKING / WO, O. SPEC & Bundle Tagging Cast Part No.

Tabe Marking

P. Uom

Quality Shift Incharge Signature:

Prepared by: K-yuvaranyani.

3.74 %C -260 " TW "860.0 x CI " 632, x CIO "027. : P.O.NO. /TPI-ED /SIZE /SPEC /CONDITION/ TAG MARKING! HEAT NO. MANDE IN INDIA.

Job (Batch No.

Involce Date

Date

IC Nº

M IGGOSZD : UT AMERICA

: KBCL1601415

-29-IVN-16

ELSGOSTZ99:

91-NVI-1E:

: EVE/9CICION49

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	_	-200	SEO.	9.	23	1	Kall
	1			E	81.		ally.
IV%	18%	5%	4%	EW%	3%	Heat No.	1110011

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		GO monthes
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	: Test :	New-Destructive

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100% TESTED OK	. 001	Eddy Current	-		Hev. Plans.
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Unit: Tabe Freducts of India Module - I for Tube Investments of India

Mgr-Quality-IBP-TP

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1-0710001. 3WL

TPI Work Test Certificate

TUBE PRODUCTS OF INDIA - MODULE - I LIBE INVESTIGENTS OF INDIA

WIGN

POST BOX NO.4 & 18, M T H ROAD, AVADI, CHENNAI - 600054

Job /Batch No.

Involce Date

Invoice No

Date

TCNo

- Mgr-Quality-IBP-TP ManavadiaM 13.0

Spec 0.76/1000 MM MAXX

XAM-SHO

CHS-MIN

rabi

DES

Spec

Unit: Tube Products of India Module - I for Tube Investments of India

DEFECT FREE

030 / 1000

GSL.

LSL

94.

CCT.

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Quantity In: 1857,513 Ft

: EBCL1701331

FI-MAL-1E:

: 4421810999

: 10-FEB-17

: PAE/8C1720318

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1001

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OD

esdoni : ni endi

Heault

100% TESTED OK

Order No.

: BC6903 \77-DEC-16

Condition Specification

Bundle No's

Cust Part No

**Tube Marking** 

Size

: Inches

P. Uom

V 4897861

Quality Shift Incharge Signature:

Rev. Flang, Eing, Gang, Len Planging

Plattening.

Crushing

Technological Tests:

D31954

Flaring

Test

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MAIN

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XEM

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Process

Lonmuc by A o It: 4 boundary

Spec

Full Section Longitudinal Tendle Test at Boson Ta Test | Heat We W.S. Y.S.

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3%

This is to certify that the goods are supplied as per the purchase order and specification Requirements

Hassilt

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ATM

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aM%

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18%

Heat No.

CYDEE VANTARIE:

1.000" OD X 0.760" ID X 0.120" WT X 20" 24" PAL

: P.O.NO. /TPLED /SIZE-/SPEC/CONDITION/ TAG MARKING/ HEAT NO. MADE IN INDIA.

CRADE DESTINATION / BUNDLE NO /COUNTRY OF ORIGIN. COSTONIER SIZE /CONDITION /QUANTITY /GROSS WEIGHT /TAG MARKING / WO.NO. / SPEC &

BuiggeT albava

: 017000842

YUIS:

I VOLIM VOI 3/4 SI 3M-15 TS CI 020 W: PRECISION STEEL TUBES - CDW

Description

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HOW MORE

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Non-Destructive Tests:

OD.

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**Straightness** 

wnundabba









SS 86.09

7.1-Ch11-745

### Material Test Report

Manifest: 709584

E458691 TICKEL

Description: 1.250 x 2.000 RECT. BAR Part 160001442 Cust P.O.: 791663

Om Order: 879031-1

Die: E204038

Print Date: 6/22/17 Alloy Temper 6061 T6511

3B5790

CastMum

Chemical Composition

21.0 500 20.0 10.0 90'0 18.0 **\$0.0** 22.0 TI.0 09'0 Other Total OtherEach II . uz Q ME <u>uw</u> CIT <u>54</u> Maximum

521 94114 IL'DD L1/71/9 3B5790 71383 2" gage length उ% व्यक्ति Tensile Date T Elongation Ultimate Yield. Test #107 Cast # Sample Strength ksi Mechanical Properties

A8/002A-99-2MA

Applicable Specifications: (ASTMB221-14

County of Origin: ONTARIO, CANADA

agreed upon specifications provided written notification is received by Can Art within 30 days from the date of stupment. incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with

Evan Eng, Quality Assurance Manager

Eric Hotte - Tensile Testing

:baxinorityA

CO13/1 411

1-445-14t

### Test de dureté Rockwell Rockwell Hardness Test

Client / Customer: LES ACIERS TRANSBEC (1997) LTEE.

Adresse / Address: 4054 BOUL, LE CORBUSIER, #201

HALSR2

# commande 2000 / 2000 order #: 7100203

# pou de commande / Purchase order #: OU-48345

# de matrice / Die # : Ms 15954 Description(:

Alliage & trempage / Alloy & temper 6061 T6

# Contrôle / Control #: 553-1

# Coulée / Cast # (70740)

Dureté Rockwell E hardness : 94 HRE Min. required : 88 HRE

Composition chimique typique / Typical chemical composition:

	!5	əi	u.D	nM	БW	າວ	uz	īī.
£90	05.20 - 0.60	xDM 25.0	XDM 01.0	0,10 Max	06.0 - 24.0	0,10 Max	xoM 01,0	xpM 01.0
900	06'0 - 09'0	XOM 25,0	0,10 Max	0,10 Max	09.0 - 04.0	0,10 Max	0.10 Max	0,10 Max
A200	17.0 -99.0	0,14-0,28	81.0 - 80.0	92,0 - 81,0	\$2.0 - 8\$.0	XDM E0.0	xpM 20.0	XDM 20,0
190	08.0 - 04.0	XOM 07.0	0,15-0,40	XDM 21,0	0,80 - 1,20	0.04 - 0.35	0.25 Max	xoM 21.0
1381	E.1 - 7.0	0,5 Max	0,10 Max	08.0 - 04.0	08,0 - 04,0		XDM 02.0	xpM 05.0

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221-14 excepté pour la section 8.2 (nombre de spécimen).

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen) .

date: 2017-11-09

Sincèrement vôtre,

Yours Iruly,

Daniel Altredo Pelletier Directeur Qualité Quality Director

Max. permitted: 100 HRE

Max. permis /

4x3/4" FLAT BAR

Longueur / Lenght:

F.07.04 rev0 Rapport depropriétés mécaniques.doc

EN 10204 (2004), 3.1 CERTIFICAT DE RECEPTION INSPECTION CERTIFICATE **ABNAHMEPRUEFZEUGNIS** CERTIFICATO DI COLLAUDO









### Valbrunaspa Accialerie.

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.

DUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER

Certificato nr: MEST618656/2014/

(4) SECTION II PT.A 2013 EDITION (5) to ASTM AA79 (7) RUSINAECE MR0175/ISO 15156-3, second edition 2009-10-15

(2) SECTION II PT A 2013 EDITION
(2) SECTION II PT A 2013 EDITION
(2) SECTION II PT A 2013 EDITION

Conterms ording nr: E114012062



evanperd aurny on sibig Maichio di Fabbiica:

порослог и агуыр Биндап ие I чаккуелг Бегиры оки уунулгандары Punzone del Collaudatore:

E0\00+052 800S +15A MT2A ASME SA320 2013 B8 CLASS1 (3) ASTM A193 2011 A88 CLASS1 (0) A E0/0040ES E10S S81AZ BMZA A 0040E2 H 6533 2MA

380040411V-G :anoisibag ib oaivvA

Ordine nr. 411005038 Stock - Canada

GOA+3 :enoissaceing biucesahous dely

(a) A 50/004052 BS103 S814 MT2A A 50/004052 A5103 3754 MT2A (a) 50/004052 1003 5744 MT2A ASME SA276 2013 S30400/03 A (2) A 306/405 C 304/304L A JA0E/A0E IZIA

NACE MR0103 2010 S30400/03 A

Specifiche: State di formittes: Hot rolled Desceled Annealed Hot rolled

Produtione: ACCINIERIE VALBRUNA S.P.A.

QQ-S-763 F 304/304L A ASTM A320 2011A B8 CLASS1 ASME SA193 2013 BB CLASS1 (1) ASME SA479 2013 530400/03 A (4) ASME SA679 2013 PRACTICE E A E040EZ L 7482 2MA ¥ 700€/90€ 0 ISA

LST SZ1-MILTON, ONT LST SZ1-CA 8724 HOLGATE CRESCENT

Telephon number, 0039 (0) 444968211 Sisb.: 39100 BOLZANO (Italia) - Via A. Volla. 4

Cijente / Besseler Purcham. Organi VALBRUNA CANADA LTD

(5) For products machined directly from bar refer also (1) SECTION II PT A 2013 EDITION (3) SECTION II PT.A 2013 EDITION (U) SECTION II PT.A 2013 EDITION

(6) Chemical analysis only. (7) Technical analysis only.

Quahra 304/304L

S32 GIL XSm1 001 09 Ob 94 30 шш ASIOU UCUISZII J AH % um ян %S,0 qA PP 3 шы OJNOM SQUUIIA professe maped memperin PERSONAL STATES TEST ٠٤ SZNEdizer RZZBINA arufirmo de fersi a l'erai de lauriffure ARUTINACH IG OTATS OLLA TEST 456903270 2'96'2 566000 SSt/bbt 2,5000 x 0,7500 Flat 0050 Product description Centre 15-tan Colata ni - inoiznamio ezzaußuก OBBeno Punzanatura, 304/304L CHERTS TATIONS UCBY SOME FUCE Tolleranza: ASTM A484-14 TABLE 5 JSIA

Grain size for ASTM E112 ¥ шэх UILL TEST 381 0/ 25 16 9t 89 15'2

egnsT=D ,reuptakkessvarvarvarvarvovur, C=Tange

### Analisi chimica

		0,093	750,0	0,032	611,0	60,8	15,0	SÞ,0	18,24	1,64	17'0	0,020	Se6000
		% N	% S	% d	% 00	% !N	% no	% OW !	%10	% uM	% !S	%0	
		001,0	0.020 0.030	010,0		00.8	00,1	00,1	00.05 20.00	2.00	00,1	осо,0 хет	Colata Heat

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Intergranular corrosion test per ASTM AS62 pract. E: ok. Micro and macro etch test: OK

Absence of cracks at 20 x magnification after bend test.

Reduction ratio = 26.7:1

Annealing temperature: 1940°F for 1 hwater.

Pagina - 1 di 2

# collaudatore di etabilimento / der Werkssachverslandigo Morks mspector / L'agent d'usine

Vicenza, 17/12/14

4

CERTIFICAT DE RECEPTION EN 10204 (2004), 3.1 INSPECTION CERTIFICATE **ABNAHMEPRUEFZEUGUIS** CERTIFICATO DI COLLAUDO

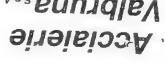












Valbrunaspa

Telephon number : 0039 (0) 444968211 Steb.: 39100 BOLZANO (fielis) - Via A. Volta. 4 36100 VICENZA (Italia) - Viale della scienza, 25 z.l.

Cliente / Bezertenthurmaecicien

VALBRUNA CANADA LTO

Produtione: ACCINIERIE VALBRUNA S.P.A. 8724 HOLGATE CRESCENT LST 5Z1-MILTON, ONT LST 5Z1-CA

State of formiture: Hot rolled Descaled Annealed Hot rolled Letter couserd Deseaty Easter (see for investigation in the contraction of the contra

Material is DFARS Compliant

material à est acuré contours du la cronognos este la recimentens material à est acuré contours des la accordance esté la récimentens

Sono state soddistatte tutte le condizioni richieste

Melted and manufactured in Italy

Controllo antimescolanza: OK

No welding or weld repair

Meterial free from Mercury contamination

Tipo di Elaborazione. E+AOD

Ordine nr 411005038 Stock - Canada

Avviso di Spedisione: D-VI14040056

DUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S RECISTER

Any act of tampering, modification, alteration, counterfeiting and/or falsification and interests before any competent count, authority and jurisdiction. The Quality Management System is Certained acc. Pressure Equipment Directive (97/23/EC) Annex 1.s., 4.3 by TUEV and LLOYD'S. We declare that the finished product is checked for redioactive contamination through Ponal System when it leaves the production plant.

The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supprements shall be specifically demanded at least, upon order of the Prichaser. Accisiers Valbruna SpA shall not be responsible for any improper use of the Prichaser.

Controllo Ajelvo e qimenzionari santando Arma meberovi sua numberusi cuarri separanouk Gestrulendo usu nemerusi cuarri separanouk Tanga numberusi sugarano separano s

Siemnei des Weitzschurschieben asbagen inspeder s sampfencen de la asbagen

Conferms ordine in: E114012062

Certificato nr: MEST618656/2014/

Punzone del Collaudalore:

Marchia di Fabbrica

O.C. Reviewed

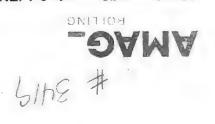
Pagina - 2 di 2

il collaudatore di siabilimento I der Werkssachversländiger Works, inspector I L'agent d'usine
M. Alizzott P. M. M. Siabilimento I agent d'usine

Vicenza,17/12/14

(WOO MEES)

ja.



Nr.: 89051448

Rev.: 0

1 von / of 2

Seite / page:

Abnahmeprüfzeugnis 3.1 (EN 10204)

Inspection certificate - mill certificate

2017 05 29

AC 166V

Datum / date:

Zerlifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

qnkt / broduct	Bedingungen / terms	
irenempfånger / consignee: SBS Atlanta ISO0 Cherokee Pkwy ISON CHER GA 30102-1603 ASU	Auftragabeat. Mr. / order confirm no.: Datum / date: Lieferschein Mr. / delivery note: Datum / date:	12721 20 7102 84418 2011 06 30
·	Bestell Nr. / order no.: Datum / date:	5400341710-R01 2017 02 23

recurische Liefengenngungen / techn. spec...

41 - 605 8 MTSA AMS-QQ-A-250/11) 08.1997

ASME SB-209, 2011a 8002.70 ,NYSO4 2MA

Sondervorschrift / special terms:

Dim. / dim.: [inch]: 0,050x48,00x144,00 2 Anstand / tempen 16 Werkstoff / material: 6061 Form / form: Sheet

Kundenartikel Mr. / cust. article no.: ALFLR01645

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611	3977,072 lbs	1270310007	1909	7/2205800\10	00	10/96688	03

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01/0083055/7	1909	15	9-3	no	nM	6yy	Cr	υZ	IT	Others	Others
	actual	99'0	04,0	0,25	£1,0	86'0	41'0	60,0	60,0	20,0	60,03
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Josef Klampfer

Nr.: 89051448 Rev.: 0 Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate

2 von / of 2 2017 05 29

Seite / page:

Datum / date:

Zerüfizieri nach / cerüfied to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

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Lotino.	temper	direction			[ksi]	[ksi]	[%]	
BUT/LOS	Zustand	Richtung	Tests		STU	SA	"SA	

losef.klampfer@amag.at

Lism-9 / lisM-3

Herstellerland: Österreich / goods ongin: The goods are of Austrian origin. Maschinell erstellt - Güttig ohne Unterschrift / Automated - valid without being signed.

Werksachverständiger / factory specialist

Cetb M

InanoLiLI-7HA

Php IT

Certificate No : 1808LB6672

TEST CERTIFICATE

### MIMAJUH®

0 390

SSECTOTES, ANT GUR TAN COME DESTREOR AND BURNEL YNDSSCHOOL WITGERUNG ANNIGHT. SECTION CHARACTER AND SECTION CHARACTER SECTION CONTROL CHARACTER SECTION CHARACTER SECTION CHARACTER SECTION CHAR

MECHANICAL TEST RESULTS Cese No : ADMIRDIZ Complied PALIST No : FITTZH 1 Lift-I Widol HULLIMIN Order No : 627446E Cust Respent Not 27286J8001 Coul Order No : Confidence No : 7855-P.5(151792 Helesse Ho redust - four L004 - L000 MATERIAL THE PALIES No: SMOOSIBE 032. X 402 X 802 : notanent@ 10 N E LOOR EMPIRE RESOURCES INC 0050NB0/50 FOI NO 1 Product: 260"X 48.6"X 96.8" PLATE 6061, 1961 NEED ISSE Shipping Floridgins BUYER:

0.259 21/20/12 450 1909 10-20150022 REM\_ARDP 05/09/1090/20 X'BW 920 45.0 01 1700 UN (BOUDUI) eguað ritgnesi (seriani) (%) (14) (427) (HEN) Actual Gauge OSV Page 1841 PLING **GULLES** SIG Legmen PIPLA Spec No YOUNA CORI NO. D4 1518/0 TOL NO. Hechanical Properties

IZ'IB 90'0 0.28 \$10.0 10.0 61'0 10.12 270 89,0 1900 REM\_ABOP 9170 90'8 91'0 920 0.35 21 21.0 010 10.0 80 91'0 010 HIM (NEW Totalik) **Esch(X)** (%) 11 (16) 02 (Kho (56)099 (IC) UN cn (3t) (%)18 VIJON CAST NO. CHEMICAL COMPOSITION

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TP. Ngusons - Robod Product Technical Memors

AG 177

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Shoele

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BLAZ UNV EZ LICHYS DIEJELE

1986/7 the-nul

3.1

48490 UGAO-MIRAVALLES/VIZCAYA (SPAIN) ARANA Y LIFARDO, 2

LES ACIERS TRANSBEC (1997) L'TÈE

Tfbo.: 946480211

www.calibradospradera.es

Email: त्क्रीमार्थलक्ष्मित्वाक्रियन्त्रका Esx: 946480128

CERTIFICADO DE CALIDAD/QUALITY REPORT

EN TOSONDIN 20049

N. CERTIFICADO! CERTIFICATE VIZ. 49709

CUSTOMER

CLUENTE

Delivery Note Nr. 49709 ALBARAN

Productos Calibrados de acero. Condiciones técnicas de suministro.

De neuerdo a Ablade necording to:

: MILON MOLLING: EN 10277

Bright steel products. Technical delivery conditions.

FRODUCTO SOLICITADO! PRODUCT ACCORDING ASTNAIOS

12,70	L19916	011'0 -	066	1018 CUA, ESTIRADO 12,70 (1/2")	SN181-4014
38,10	209916	150'0 -	1.020	13L14 RED. ESTIRADO 38,10 (1 1/2")	PAR. 48143
08,08	956936	061'0 -	\$61°I	1018 CAY ESTIRADO 50,80 (2")	EN184-RA9
07'57	084916	081'0 -	086	1018 COV. ESTIRADO 25,40 (1")	PAR-48143
08'05	984916	061'0 -	\$61.1	1018 CUA. ESTIRADO 50,80 (2°)	V-18475
St'tt	150916	091'0 -	766	1018 COV. ESTIRADO 44,45 (1 3M°)	STA8A-IV
35,40	084916	051,0 -	1.034	1018 CUA. ESTERADO 25,40 (1")	5L+87-11
धरंग	971516	061,0 -	068	TOTA CUAL ESTIRADO 22,23 (787)	5488-IA
50'61	766516	- 0,130	1.002	1018 CUA. PSTIRADO 19,05 (3M7)	STABLIV
12,70	£19916	0110-	Z66	1018 CUA. ESTIBADO 12,70 (1/2)	51487-TV
£\$'6	108916	060'0 -	059	1018 CNY ESTIRADO 9,53 (3/87)	SLYSTIA
15'6	066516	060'0 -	974	1018 CUA. ESTIRADO 9,53 (3/87)	SL181-IA
50'61	£88916	150'0 -	966	1018 RED. ESTIRADO 19,05 (34/2)	SLHEH-IA
88'51	016916	150'0 -	1.020	1018 RED. ESTIRADO 15,88 (5/87)	21484-IV
£\$*6	141131	150,0 -	2.130	1018 RED. ESTRADO 9,53 (3/8")	SL18FIA
€5'6	1111171	150'0 -	2.072	1018 KED. ESTRANO 9,33 (2,43)	2 616LF10
12,70	L19916	0110-	786	1018 CUA. ESTIRADO 12,70 (1/22)	DA1-48736
£5'6	066516	060,0 -	88L	1018 CUA. ESTIRADO 9,53 (3/8")	PA1-48736
32,40	084916	0.130	9801	1018 COLA ESTIRATIO 25, 10 (17)	PAJ-18393
9238	260416	150'0 -	816	1018 RED. ESTIRADO 6,35 (1/4°)	PAR-48569
05'59	160416	960,0 -	₱60°I	INTIA RED. ESTIRADO 63,50 (2 I/2")	16061-NIX
Aval (ra	O.			1005	

Composición quintea de la colada / Churicol Anolysis of Heal

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00 40828 Q 0'150 0'000 0'108 0'108 0'109 0'000 0	1916	00'0 08'05
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\$\frac{10}{10}\$         \$\frac{10}	LS16	52,23 0,00
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COLADA % % % % % % % % % % %	10	MEDIDA

Trno.: 946/180211 48490 UGAO-MIRAVALLES/VIZCAYA (SPAIN) ARANA Y LUPARDO, 2

23.615bmq2cbet0lfn3.WT/W Emeli: calpinadem@calibindospiadem.ca Fox: 946480128



### CERTIFICADO DE CALIDAD/QUALITY REPORT

COLLONER Delivery Note Nr. LBS ACIERS TRANSBEC (1997) LTER CLIRNIE 48108 VYBVBYK

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CI

Productos Calibrados de acero. Condiciones técnicas de sumínistro.

00'0 01'88

MOLDIN: EM 10141

Bright steel products. Technical delivery conditions.

HOLL

TALLA RED. ESTIRADO 38,10 (1 1/2°)

TOTAL ESTIRADO 19,05 (3M7)

1018 RED. ESTIRADO 15,88 (5/8")

1018 RED. ESTIRADO 9,53 (38")

1018 RED. ESTIRADO 9,53 (3/8")

1018 RED. ESTIRADO 6,35 ( (Mª) ISCIA RED. ESTEADO 63,50 (2 1/2")

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Corrected case mechalics ! Mechanical proparts

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Description

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D, 29% Whama?

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EN 19333-1

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N. CERTINICADO I CERTIFICATE NR. 49709

### EN 10304/DIM 20049 De acuerdo a Made according for

Fax: 946480128 Tho.: 946480211 V8480 NOVO-VUBYANTESPAISCARA (SPAIN) ARANA Y LITRARDO, 2

www.calibradospradera.es Brazil: celprodera@celibradosprodera.cs

### CERTIFICADO DE CALIDAD/QUALITY REPORT

EN 10504/DIN 20046

De acuerdo a Miade according to:

N. CEIKLIERCYDO \ CEKLIERCYLE NK: 48108

CYZLONER LES ACIERS TRANSUEC (1997) LTÉE CLIENTR

Productos Calibrados de acero. Condictones idenicas de sambhisino. Notion: EN 10177

49709

: MOVE

Delhiery Note NY.

ALBARAN

Dright steel products. Technical delivery conditions.

OPSERVICORIS: BARRAS DE ACERO ESTTRADAS RA FRIO SIN ALRAR



1.6

FeeharDates 20/11/2017 QUALITY DEPARTMENT: Certify that the product fulfile the order specifications. DEPARTABIENTO DE CALIDAD: Certifica que el mendenado producto cumpie con las especulenciones del pedido.

Directora de Calidad enbuharny sanzug toberatil

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138484

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**L06516** 

LSSS16

066516

078516

166516

9610 0100

110'0 667'0

TEDO:: 946480211 48490 UGAO-MIRAVALLES/VIZCAYA (SPAIN) ARANA Y LUPARDO, 2

Email: celpradera@celibradoopradera.es Fax: 946480128

www.cslibradospradcra.es



CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a Made according to:

N. CERTTFICADO / CERTIFICATE NR.: 46579

LES ACIERS TRANSBEC (1997) LTEE

PRODUCT ACCORDING ASTM A 108

700,0 000,0 000,0 068,0 000,0

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000'0

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110'0 | 571'1

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960'0

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0600

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0000 : 0910

000'0 940'0

0000 0800

960,0 070,0

540,0 1.880,0

000'0 | 051'0

0000 1 5910

25,40 (17)

25,40 (17)

25,40 (17)

25,40 (17)

CUSTOMER

6L597 NARABJA

: WUON

Productos Calibrados de acero. Condiciones técnicas de suministro.

Bright steel products. Technical delivery conditions.

MOLLOS : EM 10711

PRODUCTO SOLICITADO!

Delivery Note Nr.

Caracteristicas mechalcas / Mechanical properties

138623

138527

138523

138464

160916

6778EL

918516

135807

\$86LE1

202281

707746

106516

L55516

066516

166516

OŁ

8101

1018

1018

8101

1018

1018

8101

Composición química de la colada / Cremical Analysis of Heat

25,40 0,00

25,40 . 0,00

25,40 , 0,00

22,23 0,00

25,40 0,00

00'0 | 58'69

41,28 0,00

00'0 SL'IE

22,23 0,00

31,75 0,00

00'0 85'6

000 556

00'0 88'51

1 iducansoay

MEDIDA

DU-47424

MIP-47245

PAJ-47284

PAR-ATATZ

PAJ-47267

MOP47724

890LF-NIW

890LT-NW

89047-NIM

PAR-47159

PAR-47159

MUP-46937

18691-LA9

18691-LA9

91491-WS

91/91-WS Parchase Ord N. PEDIDO

018516 00'0 .50'61

00'0

41198 G 0'160 0'000

000,0 001,0 D 8911h

091'0

091'0

0800

0/00

591'0

99825 GM 0,170 0,000

0910 | 586717

D 86111

Ð 8611Þ

SI 1950p

40531 IZ

SI 62Z07

90341 C

D 6180+

W 0896E

40878 G

40080 S

S 6E90+

COST Nr.

COLADA

RED. ESTIRADO

RED. ESTIRADO

RED. ESTIRADO

RED. ESTIRADO

12L14 RED. ESTIRADO 69,85 (2 3/4")

12LI4 RED. ESTIRADO 44,45 (1 3/4")

12L14 RED. ESTIRADO 41,28 (1 5/87)

12L14 RED. ESTIRADO 31,75 (1 1/47)

12LIA HEX. ESTIRADO 31,75 (1 1/47)

INTICHED. ESTIRADO 22,23 (7187)

1018 CUA ESTIRADO 9,53 (3/8")

1018 CUA. ESTIRADO 19,05 (3MT)

1018 CUA. ESTIRADO 15,88 (5/8")

RED. ESTIRADO 22,23 (7/8")

RED. ESTIRADO 25,40 (1")

RED. ESTIRADO 9,53 (3/8")

EN 10104/DIM 20049

48490 NGAO-MIRAVALLES/VIZCAYA (SPAIN) ARANA Y LUPARDO, 2

Email: calpradera@calibradospradera.es Fax: 946480128 TEDO:: 946480211



### CERTIFICADO DE CALIDAD/OUALITY REPORT

I.E

N. CERTIFICADO / CERTIFICATE NR.: 46579

CUSTOMER

Delivery Note Nr. MARABIA

Productos Calibrados de acero. Condiciones técnicas de suministro.

: MON

L'im-elfatice Bright steel products. Technical delivery conditions.

MEDIDA

Measurement

Norma: EN 10277

6L59b

LES ACIERS TRANSBEC (1997) LTÉE

18'15

18'15

18'15

18'15

L6'SS

18,12

00'0

00'0

00,0

41'62

6CLV

6L'St

£9'09

00'0

66'79

19'95

Rotricción %

EN 10304/DIN 20046 De scuerdo a Made according to:

www.calibradospradera.es

DEPARTANKENTO DE CALIDAD: Certifice que el mencionado producto comple con las especificaciones del pedido.

£6'99S

£6'99\$

E6995

E6'995

E0'579

E6'995

48870

05,852

05,822

55430

£\$'9\$\$

85,552

09'E1L

FE EST

530,32

10,282

Zunu/N

Tens, strenght

Rethtenda



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EN 10277-1

Class

172,00

172,00

172,00

172,00

185,00

172,00

00,081

00'561

00'061

172,00

172,00

00'691

205,00

247,00

162,00

00,081

BH

Hardness

Digress HB

160916

918516

LOSSET

137984

182202

202246

206516

LSSS16

JO

50,842

50'815

50'815

50,842

15'665

50,812

09'697

05'605

543,30

245 90

ITLES

50,523

684,30

87'194

82,012

01'655

0,2% N/mm2

Yield point

.05'97

05'97

-05'97

76,50

24,20.

05'97

01,22

0E'S1

11,12

. 92, 91

80°0Z

12,04

11,10

76'01

34,50

91'51

דס=20 שושר

Elongotion

Alargamicuto

Directors de Calidad Firmado: Susana Fernández

QUALITY DEPARTMENT: Certify that the product fulfile the order specifications.

Opeclasquies: BYERYS DE VCERO EZLIBYDYS EN ENIO ZIN YTEYE

(48/2) 256

D 86114

D 86115

D 86111

€11198 C

9 LILOP

D 86111

SI 1950b

SI LEZOP

40229 IS

D 11601

D 67804

W 0896E

39825 GM

40878 G

S 0800+

S 68907

Cast Nr.

COLADA

RED. ESTIRADO 22,23 (7/8")

138623

138527

138523

138494

160916

138229

918516

135807

137984

182202

202246

406516

LSSS16

066516

018840

166516

OL

12L14 RED. ESTIRADO 69,85 (2 3/4")

IST 14 RED. ESTIRADO 44,45 (1 3/4")

IZLI4 RED. ESTIRADO 41,28 (1 5/8")

ISLI4 RED. ESTIRADO 31,75 (1 1/4")

IZLI4 HEX ESTEADO 31,75 (1 1/4")

12LI4 RED. ESTIRADO 22,23 (7/8")

RED. ESTIRADO

Description

52,40

75'40

25,40

72'40

22,23

72'40

58'69

50'00

41,28

SL'IE

22,23

SLIE

£5'6

£5'6

50'61

88,21

DESCRIPCIÓN Calidad Superficial

Pecha/Date: 24/03/2017